

# STIC Search Report Biotech-Chem Library

#### STIC Database Tracking Number

TO: Nita M Minnifield

Location: rem/3C01/3C18

Art Unit: 1645

Monday, December 19, 2005

Case Serial Number: 09/970076

From: Edward Hart

**Location: Biotech-Chem Library** 

**REM-1A55** 

Phone: 571-272-2512

edward.hart@uspto.gov

#### Search Notes

Examiner Minnifield,

Here are the results of the search you requested.

Please feel free to contact me if you have any questions.

**Edward Hart** 

Reviewed 12/05



THIS PAGE BLANK (USPTO)

From:

Chan, Christina

Sent: - To:

Tuesday, December 13, 2005 6:38 PM Minnifield, Nita; STIC-Biotech/ChemLib

Subject:

RE: rush interference sequence search

#### Please rush Thanks Chris

#### Chris Chan

TC 1600 New Hire Training Coordinator and SPE 1644 (571)-272-0841 Remsen, 3E89

-----Original Message-----

From:

Minnifield, Nita

Sent:

Tuesday, December 13, 2005 1:27 PM

To:

Chan, Christina

Subject:

rush interference sequence search

Christina, please approve, AF amdt.

STIC

09/970076

Please do an interference sequence search on the following sequences found in the above application.

Please search against both aa and nt databases.

SEQ ID NO: 1

nt 104-1207 of SEQ ID NO: 1

SEQ ID NO: 2

aa 27-321 of SEQ ID NO: 2

aa 28-320 of SEQ ID NO: 2

aa 41-227 of SEQ ID NO: 2

aa 44-216 of SEQ ID NO: 2

aa 42-222 of SEQ ID NO: 2

Please provide a paper copy of all results.

reverse to AA

STN:

DIALOG:

QUESTEL/ORBIT LEXIS/NEXIS:

Encode/Transl: Structure #:\_ \_Text: Inventor:\_\_\_

S/L:

Oligomer:

\_ Litigation:\_

WWW/Internet:

SEQUENCE SYSTEM Other (Specify):

Searcher: Searcher Phone: Date Searcher Picked up: Date completed: Searcher Prep Time: Online Time:\_

THIS PAGE BLANK (USPTO)

```
Sequence 669, Application US/10104047

Patent No. 6943241

GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
ITILE OF INVENTION: No. 6943241e1 full length cD:
FILE REFERENCE: H1-A0105
CURRENT APPLICATION UNMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE:
NUMBER OF 580 ID NOS: 4096
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 669
LENGTH: 2234
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                     RESULT 2
US-10-104-047-669
                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             , NAME/KEY: CDS
, LOCATION: (309)..(1202)
US-09-620-312D-8
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_44_216 (1-173) x US-09-620-312D-8 (1-1609)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 8
LENGTH: 1609
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                      678
                                                                                                                                                                                                                                                                                                                                                                                                                                                 819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        498
                                                                                                                                                                                                                       918
                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                              798
                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                         738
                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                                                                 GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                                                                                                                                                                                                                                                                                                         GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspLeuTyrPhoIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                      GGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTG
                                                                                                                                                                                                                                                                               AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                                                                                                                                                                                                                                                              GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTC
                                                                                                                                                                                                                                                                                                                                                                      ValllelleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                                                                                                                                                                                                                                     AATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGAC
                                                                                                                                                                                                                                                                                                                                                          GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.52e-108
899.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1609
173
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40
                                                                                                                                                                                                                                                                                                                                     140
                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                    677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      497
                                                                                                                                                                                                                                                                                                                857
                                                                                                                                                                                                                                                                                                                                                            797
                                                                                                                                                                                                                                                                                                                                                                                                      737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           557
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Мо
::
                                                                                                                                                                                                                                                                                                     1132
                                                                                                                                                                                                                                                                                                                                                                                           1012
                                                                                                                                                                                                                                                                                                                                                  1072
                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                        952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41
```

```
GENERAL INFORMATION:

APPLICANT: Tang, Y. Tom
APPLICANT: Zhou, Ping
APPLICANT: Zhou, Ping
APPLICANT: Zhou, Ping
APPLICANT: Abundi, Vinod
APPLICANT: Abundi, Vinod
APPLICANT: Zhang, Jie
APPLICANT: Zhao, Qing A.
APPLICANT: Zhao, Qing A.
APPLICANT: Yang, Yonghong
APPLICANT: Wang, Yonghong
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Dinrui
APPLICANT: Wang, Dinrui
APPLICANT: Dimanac, Radoje T.
TITLE OF INVENTION: No. 6743619el Nucleic A
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 802
CURRENT APPLICATION NUMBER: US/09/774,528
CURRENT FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-774-528-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-104-047-669
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 297, Application Patent No. 6743619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101 VallleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
||||||:::|||||||||
| ATTTCGTACAGCAACTTGCGGAGAGATTTGTGAGCCCTGAAATGAGATTATCTTTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlyPheGlnAlaLeuGlnGlyIleIleHi8SerIleLeu 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAGCAAGTTTTCCCTGTCAAAAGGT 1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atcataattigctctgacagatggcaagttggacggtctggtgccatcatatgcagagaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANAGGCTTGGAGGATTTAAAACGTGTTAGTCCAGTAGGAGAGACATATATCCATGAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GIGITITICITCICAAGCAACTATIATITIGCCATIAACIGGAGACAGAGGCAAAATCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValPheSerThrArgGlyThrThrLeuMetLy8LeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATCTCTACTTCGTCCTGGACAAGTCTGGGAGTGTGGCAAATAACTGGATTGAAATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGGCAAAGATATCCAGGTCACTTGGGGGCTAGTGTTTATTGTGTTGGTGTCCTTGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTAAAGCTAGCGAATGAACAAATT-----CAGAAAGCAGGAGGCTTGAAAACCTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PheGluArgAlaSerGluGinIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.49e-58
519.00
79.19%
59.54%
57.73%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US/09774528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                x US-10-104-047-669 (1-2234)
                                                                                                                    Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative:
                                                                                                                    Acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2234
103
34
34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
```

Sequence 36 Appl Sequence 36 Appl Sequence 36 Appl Sequence 54 Appl Sequence 45 Appl Sequence 52 Appl Sequence 53 Appl Sequence 54 Appl Sequence 57 Appl Sequence 58 Appl Sequence 59 Appl Sequence 59 Appl Sequence 51 Appl Sequence 31 Appl

Patent No.

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -MODELL-frame*_D2n.model -DEV=xlh
-Q2/cgn2_1/USPTO_spool/US09970076/runat_14122005_111850_20999/app_query.fasta_1.2410
-Q2/cgn2_1/USPTO_spool/US09970076/runat_14122005_11850_20999/app_query.fasta_1.2410
-DB=189ued_Patent8_NA -OFMT=fastap_-SUPFIX=rni -MINMATCH=0.1 -LOOFCL=0
-LOOPEXT=0 -UNITS-Bits -START=1 - END=-1 -MATRIX-blogum62 -TRANS-human40.cdi
-LIST=45 -DCCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODEL-CCAL -OUTEMT=pto -NORM-ext -HEAPSITE=500 -MINLEN=0 -MAXLEN=200000000
-USER-US09970076_GCGN_1 1_535_@runat_14122005_111850_20999 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPQP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ջ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Command line parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
8
8
     461
138.5
138.5
138.5
138.5
138.5
                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Beq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of hits satisfying chosen parameters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic search,
                                                                                                                                                                                                                                                                                                                                          Issued_Patents_NA:*

1: /cgn2_6/ptodata/l/ina/1_COMB.seq:*

2: /cgn2_6/ptodata/l/ina/5_COMB.seq:*

3: /cgn2_6/ptodata/l/ina/6A_COMB.seq:*

4: /cgn2_6/ptodata/l/ina/6B_COMB.seq:*

5: /cgn2_6/ptodata/l/ina/H_COMB.seq:*

6: /cgn2_6/ptodata/l/ina/PCTUS_COMB.seq:*

7: /cgn2_6/ptodata/l/ina/PE_COMB.seq:*

8: /cgn2_6/ptodata/l/ina/RE_COMB.seq:*

9: /cgn2_6/ptodata/l/ina/RE_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   length:
       100.0
57.7
51.3
51.3
15.4
15.4
15.4
                                                                                                                                                                                     Match
                                                                                                                                                                                                    Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1303057 segs, 888780828 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-2_COPY_44_216
899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               December 18, 2005, 07:01:37; Search time 121.458 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DLYFILDKSGSVLHHWNEIY.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Copyright
                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000000000
       1609
2234
1492
1492
3528
3528
3528
3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GenCore version (c) 1993 - 2005
                                                                                                                                                                                       DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                paing
   US-09-620-312D-8
US-10-104-047-669
US-10-174-528-297
US-10-120-988-297
US-08-286-889-36
US-08-485-618-36
US-08-362-652-36
US-08-605-672-36
US-08-482-293A-36
                                                                                                                                                                                     ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                frame_plus_p2n model
                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (without alignments)
2531.884 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.1.6
Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..HVFPVNDGFQALQGIIHSIL 173
                                                                                                                                                                                   Description
                                                                                                         Sequence 8,
Sequence 66,
Sequence 29
                  Sequence
Sequence
Sequence
Sequence
Sequence
       Sequence
   8, Appli
669, App
297, App
297, App
36, Appl
36, Appl
36, Appl
36, Appl
36, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1
US-09-620-312D-8
CÜRRENT APPLICATION NUMBER: US/09/620,312D
CURRENT FILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: 09/552,317
PRIOR FILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: 09/488,725
PRIOR FILING DATE: 2000-01-21
PRIOR FILING DATE: 2000-01-21
NUMBER OF SEQ ID NOS: 115
SOFTWARE: pt_FL_genes Version 1.0
                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Idu, Chenghua
APPLICANT: Liu, Chenghua
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Asundi, Vinod
APPLICANT: Chen, Feijan
APPLICANT: Chen, Rui-hong
APPLICANT: Chen, Rui-hong
APPLICANT: Zhao, Qing A.
APPLICANT: Wahrman, Tom
APPLICANT: Wahrman, Tom
APPLICANT: Wang, Yonghong
APPLICANT: Yang, Yonghong
APPLICANT: Yang, Jian-Rui
APPLICANT: Zhou, Ping
APPLICANT: Zhou, Ping
APPLICANT: Zhou, Ping
APPLICANT: Zhou, Ping
APPLICANT: Man, Yunging
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 8, Application US/09620312D Patent No. 6569662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL
                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                               APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6569662el Nucleic Acids
TITLE OF INVENTION: Polypeptides
                                                                                                                                                  FILE REFERENCE: 784CIP2B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wehrman, Tom
Xue, Aidong J.
Yang, Yonghong
Wang, Jian-Rui
Zhou, Ping
Ma, Yunging
Wang, Dunrui
Wang, Zhiwei
John Tillinghast
                                                                                                                                                                                                                                                                                                                                                                                                   Ren, Feiyan
Chen, Rui-hong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 US-09-193-043-36
3 US-09-183-0-23-36
3 US-09-350-25-36
2 US-08-485-618-54
2 US-08-485-618-54
2 US-08-482-293A-54
2 US-08-482-293A-54
3 US-09-688-307A-54
3 US-09-688-307A-54
3 US-09-688-307A-54
5 US-08-485-618-45
5 US-08-485-618-45
5 US-08-485-618-45
5 US-08-605-672-45
5 US-08-605-672-45
5 US-08-943-253A-45
5 US-08-943-253A-45
5 US-08-943-253A-45
5 US-08-943-253A-45
5 US-09-688-307A-45
5 US-09-193-043-52
5 US-09-193-045-618-52
5 US-09-193-043-52
5 US-09-193-043-52
5 US-09-193-043-53
5 US-09-193-043-52
5 US-09-193-043-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-943-363-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ALIGNMENTS
```

```
Sequence 297, Application US/10120988

Patent NO. 6919193

GENERAL INFORMATION:

APPLICANT: Tang, Y. Tom

APPLICANT: Goodrich, Ryle

APPLICANT: Goodrich, Ryle

APPLICANT: Mang, Dunrui

APPLICANT: Wang, Dunrui

APPLICANT: DYNAMAGO, Radoje T.

TITLE OF INVENTION: Polypeptides

FILE REFERENCE: 802CON

CURRENT APPLICATION NUMBER: US/10/120,988

CURRENT FILING DATE: 2002-04-11

PRIOR APPLICATION NUMBER: 09/774,528

PRIOR FILING DATE: 2001-01-30

NUMBER OF SEQ ID NOS: 441

SOFTWARE: pt FL-genes Version 2.0
                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
US-10-120-988-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2_COPY_44_216 (1-173) x US-09-774-528-297 (1-1492)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-774-528-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 1492
TYPE: DNA
ORGANISM: Homo sapiens
PEATURE:
PEATURE:
NAME/KEY: CDS
LOCATION: (79)..(1434)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOPTWARE: pt_FL_genes Version SEQ ID NO 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14
                                                                                                                                                                                                                                                                                                                                                                                                                         HisvalPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnGlyTyrArgThrAlaSerValllelleAlaLeuThrAspGlyGluLeuHisGluAsp 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GARATGAGATTATCTTTCATTGTGTTTTCTTCTCRAGCAACTATTATTTTGCCATTAACT 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAsp 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGGCTTGAAAACCTCCAGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTG 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGACATATATCCATGAAGGACTAAAGCTAGCGAATGAACAAATT-----CAGAAAGCA 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATAACTGGATTGAAATTTATAATTTCGTACAGCAACTTGCGGAGAGATTTGTGAGCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGCCATCATATGCAGAGAAAGAGGCAAAGATATCCAGGTCACTTGGGGCTAGTGTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGTTGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.09e-50
461.00
78.12%
57.50%
51.28%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ນ
.
0
                                                                                                                                                                              Nucleic Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1492
92
33
33
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                       US-08-286-889-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_44_216 (1-173) x US-10-120-988-297 (1-1492)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-120-988-297
                                                                                                                                                                                                                                                                                                                                                                  Sequence 36, Application US/08286889 Patent No. 5470953
     STATE: Illinois
COUNTRY: United States
ZIP: 60606-6402
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Flappy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPERATING SYSTEM: PC-DOS/MS-DOS
SOPERATING SYSTEM: PC-DOS/MS-DOS
SOPERATING SYSTEM: US-DOS/MS-DOS
SOPERATING SYSTEM: US-DOS/MS-DOS
SOPERATION DATA:
APPLICATION NUMBER: US-DOS/286,889
                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Gallatin, W. Mich
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5470953el
NUMBER OF SEQUENCES: 51
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: HOMO FEATURE:
NAME/KEY: CDS
LOCATION: (79).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
6
..
                                                                                                                                                                                             ADDRESSEE: Mar
STREET: 233 SO
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     154 HisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            114 LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    196 GAGACATATATCCATGAAGGACTAAAGCTAGCGAATGAACAATT-----CAGAAAGCA 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94 GlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       74 AspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34 GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14 HisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysvalGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAsp 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGCCATCATATGCAGAGAAAGAGGCAAAGATATCCAGGTCACTTGGGGGCTAGTGTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGCTTGAAAACCTCCAGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTG 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAATGAGATTATCTTTCATTGTGTTTTCTTCTCAAGCAACTATTATTTTGCCATTAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATAACTGGATTGAAATTTATAATTTCGTACAGCAACTTGCGGAGAGATTTGTGAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTGTTGGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAG
                                                                                                                                                                                                                 233 South Wacker Drive,
                                                                                                                                                                                                                 Marshall, O'Toole, Gerstein, Murray & Borun
3 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (1434)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.09e-50
461.00
78.12%
57.50%
51.28%
           US/08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                           Human
                                              Version
                                                                                                                                                                                                                                                                                           2 Integrin
                                              #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1492
92
33
33
2
                                                                                                                                                                                                                                                                                           Alpha
```

93

195

135

75

113

밁

ঠ 문 S

밁 5 밁 ঠ 밁 á 밁 ঠ 밁 á 밁 á

FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:

US 08/173,497

```
á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                           밁
                                                                                                                                                                                         á
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_44_216 (1-173) x US-08-286-889-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION:
US-08-286-889-36
                                                          S
                                                                                              밁
                                                                                                                           δ
                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                         В
                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: P38,659
REFERENCE/DOCKET NUMBER: 27866/32168
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: 312-474-63
TELEFAX: 312-474-0448
TELEX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 3528 base pairs
                                                                                                                                                                                                                                                                                                                                                           604
                                                                                                                                                                                                                                                                                                                                                                                                                           544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         424
                                                                                                                                                                                              114
                                                                                                                                                                                                                                                                                            649
                                                                                                                                                              769
165 LeuGlnGlyIle 168
                                                                                                                                                                                                                                                                                                                           75
                                                                                                                                                                                                                                                                                                                                                                                           55
                                                                                                                                                                                                                                                                                                                                                                                                                                                         6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                           GlyTyrArgThrAla---SerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp 113
                                                                                                                                                                                                                                                                                                                                                            GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA------GGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                           ATGCAATACTCGAACATCCTGAAGÁCCCATTTTACCTTCÁCTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                      IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-------
                                                                                                                                                            CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT------GGCATCATT
                                                                                                                                                                                         LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlYAlaIle
                                                                                                                                                                                                                           TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                           ACCTÁCACAGCCACAGGCATCCGGACAGTGATGGAÁGAGCTATTTCATAGCAAGAATGGG
                                                                                                                                                                                                                                                                                                                                                                                  AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp
                                ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                            ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.13e-07
138.50
47.83%
28.26%
15.41%
                                                     AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative: Mismatches: Indels:
                                                                     164
                                                                                                     879
                                                                                                                                                                                                 131
                                                                                                                                                                                                                                 768
                                                                                                                                                                                                                                                                                                 708
                                                                                                                                                                                                                                                                                                                                94
                                                                                                                                                                                                                                                                                                                                                                648
                                                                                                                                                                                                                                                                                                                                                                                                74
                                                                                                                                                                                                                                                                                                                                                                                                                                603
                                                                                                                                                                                                                                                                                                                                                                                                                                                              54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              483
                                                                                                                                     148
                                                                                                                                                                   819
```

```
RESULT 6
US-08-485-618-36
맑
                                 S
                                                                       밁
                                                                                                         S
                                                                                                                                         US-09-970-076-2_COPY_44_216 (1-173) x US-08-485-618-36 (1-3528)
                                                                                                                                                                                                  Query Match:
                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                US-08-485-618-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 36, Appli
Patent No. 5728533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
APPLICATION NUMBER: US 08/236,899
PRIOR APPLICATION NUMBER: US 08/286,889
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5728533e1
NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE:
                                                                                                                                                                                                                                                                           No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 233 S
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: sing
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Williams Jr., Joseph REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                   LOCATION:
                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          937 CTTCGCAGCATC 948
484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 543
                                                                       424 GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                                                                          1 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Illinois
                        TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/08485618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3528 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B: Marshall, O'Toole, Gerstein, Murray & Borun
233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                          CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                        single
                                                                                                                                                                                      1.13e-07
138.50
47.83%
28.26%
15.41%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Þ
                                                                                                                                                                                                    Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                            Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 Integrin Alpha Subunit
                                                                                                                                                                                      3528
36
71
25
                                                                               483
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-362-652-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                            CUMPUTER: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vt
CURRIT APPLICATION DATA:
APPLICATION NUMBER: US/OP/T
FILING DATE:
CLASSIFICATION OF THE CLASSIFICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                         CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 27866/3239:
REFERENCE/DOCKET NUMBER: 27866/3239:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
TELEX: 25-3856
INFORMATION FOR SEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5766850el NUMBER OF SEQUENCES: 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, G
STREET: 233 South Wacker Drive,
                    TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36, 75,
5766850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTCGCAGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuGlnGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGCAATACTCGAACATCCTGAAGACCCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IlevalPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspargGluGlnIleargGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/08362652
                                             312-474-0448
SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 O'Toole, Gerstein, Murray & Borun
cker Drive, 6300 Sear Tower
                                                                                                                      27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----GGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      54
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                            US-08-605-672-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-2_COPY_44_216 (1-173) x US-08-362-652-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-362-652-36
                                                                                             Sequence 36, Application US/08605672
Patent No. 5817515
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5817515el
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: cDNA FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 3528 base pair
TYPE: nucleic acid
                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                     937
                                                                                                                                                                                                                                                                                                                                                                   165
                                                                                                                                                                                                                                                                                                                                                                                                                088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    424 GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                     CTTCGCAGCATC
                                                                                                                                                                                                                                                                                                                                                                LeuGlnGlyIle 168
                                                                                                                                                                                                                                                                                                                                                                                                                ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGCAATACTCGAACATCCTGAAGACCCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.13e-07
138.50
47.83%
28.26%
15.41%
                                                                                                                                                                                                                                                                                                                                                                                                                                                 103
                                                                                                                                                                                                                                                                                                                     948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps:
                                                                                                  Human
                                                                                                    N
                                                                                                  Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3528
52
36
71
25
```

GGCCTG

648

74 603 54 543

94

39

483 19

708

Alpha

Subunit

GGCATCATT

819 131 768

148

164 879

```
밁
                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                               5
                                                                                                    밁
                                                                                                                                  ş
                                                                                                                                                                        밁
                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2_COPY_44_216 (1-173) x US-08-605-672-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
á
                                   밁
                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-605-672-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08,
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: WILLIAMS Jr., JOSEPH A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786(
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Chicago
STATE: Illinois
COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH:
                                                                                                                                                                        544 ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG 603
                                                                                                                                                                                                                                            484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 543
                                                                                                                                                                                                                                                                                                                649
                                                                                                        604 GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA--
                                                                                                                                      55
                                                                                                                                                                                                          40
                                                                                                                                                                                                                                                                           20 TyrTyrpheValGluGlnLeuAlaHisLyspheIleSerProGlnLeuArgMetSerPhe 39
                                                                    75
                                                                                                                                                                                                                                                                                                                                             1 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nucleic acid
                                                                                                                                                                                                        IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu--------
GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 113
                                   ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 708
                                                                                                                                      AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 74
                                                                    ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1..3456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                     1.13e-07
138.50
47.83%
28.26%
15.41%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                        3528
52
71
25
                                                                                                           -----GCCTG 648
                                                                                                                                                                                                                54
```

```
δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 9
US-08-482-293A-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
JS-08-482-293A-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION UNUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION UNUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION UNUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5831029e1
NUMBER OF SEQUENCES: 103
                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
COMPUTER: IBM FC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                          SEQUENCE CHARACTERISTICS
LENGTH: 3528 base pair
                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
                                                    MOLECULE TYPE: FEATURE:
                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
               NAME/KEY:
                                                                                                                                                                                                                                                                       NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                       STRANDEDNESS:
TOPOLOGY: lir
                                                                                                                                                                                                                  TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 233 St
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
                                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         937 CTTCGCAGCATC 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             165 LeuGlnGlyIle 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               880 ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       132 ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               114 LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 709 TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6, Application US/08482293A
5831029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCCTGAAGGAGCTGAAC 879
                                                                                                                     nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----
                                                                                                                                                                                                    25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E: Marshall, O'Toole, Gerstein, Murray & 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               United States
                                                                                                                                                                                                                     312-474-0448
               1..3456
                                                                                                                                                                                                                                        312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 164
                                                                                                         eingle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08/482,293A
                                                                                                                                                                                                                                                                            27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -GCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         768
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                    RESULT 10
US-08-943-363-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_44_216 (1-173) x US-08-482-293A-36 (1-3528)
                                                                                                                                                                                               Sequence 36, Application US/08943363

Patent No. 5837478

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el Human 2 Integrin
NUMBER OF SEQUENCES: 114
CORRESPONDENCE ADDRESS:
ADDRESSE: Marshall, O'Toole, Gerstein, Murray &
STREET: 233 South Wacker Drive, 6300 Sear Tower
SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/943,36
                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                              STREET: 233 SC
CITY: Chicago
STATE: Illinoi
                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   649
                                                                                                                                                                                                                                                                                                                                                                                                                                             937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                              TRY: United States 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuGlnGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle--- 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGCAATACTCGAACATCCTGAAGACCCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTCGCAGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-------GGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 164
                                                                                                                                                                  Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.13e-07
138.50
47.83%
28.26%
15.41%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  168
                                                                                                                                                                                                                                                                                                                                                                                                                                             948
US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative:
                                    Version
                                      #1.25
                                                                                                                                                                                                                                                                           Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3528
36
71
25
                                                                                                                                                                                                                                                                           Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             39
                                                 8
                                                                                             문
                                                                                                                      S
                                                                                                                                                                  B
                                                                                                                                                                                                  á
                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2_COPY_44_216 (1-173) x US-08-943-363-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-943-363-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION NUMBER: US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS: single
                                                                                                                                                                                                                                         649
                                                                                                                                                                                                                                                                                                               604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     424 GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                                                                                                          114 LeuPhePheTyrSerGlu-----ArgGluAļaAsnArgSerArgAspLeuGļyAlaIļe 131
                                                                                                                                                                                                                                                                                                                                                                                        544 ATGCAATACTCGAACATCCTGAAGÁCCCATTTTACCTTCÁCTGÁÁTTCAAGAACATCCTG 60:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 543
                                                                                                                                                                                                                                                                           75
                                                                                                                                                                                                                                                                                                                                                    55
                                                                                                                                                                                                                                                                                                                                                                                                                            40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                     CGTTATGCTATTGGGGAGAGTGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC
                                                       ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                         CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT------GGCATCATT
                                                                                                                                                                                                                                                                           ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                 GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-----
                                                                                                                                                                                                                                                                                                                                                    AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle 19
                                                                                                                                                                  TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                    GlyTyrArgThrAla---SerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp 113
                                                                                                                                                                                                                                         ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                        IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.13e-07
138.50
47.83%
28.26%
15.41%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                 ------GGCCTG
                        879
                                                                                                                                                                                                                                                                             94
                                                           148
                                                                                               819
                                                                                                                                                                    768
                                                                                                                                                                                                                                                                                                                 648
                                                                                                                                                                                                                                                                                                                                                                                                                              54
```

á 밁 Ś

밁

밁

á

밁 8

밁 S 밁 á ₽ S 밁 र् 밁 5 밁 á

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 625139561 Human 2
FILE REFERENCE: 27866/35004
CURRENT APPLICATION NUMBER: US/09/193,043
CURRENT FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
NUMBER: 08-95 SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 11
US-09-193-043-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
 밁
                                                             밁
                                                                                          S
                                                                                                                           밁
                                                                                                                                                       S
                                                                                                                                                                                        문
                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2_COPY_44_216 (1-173) x US-09-193-043-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             , OTHER INFORMATION: Description of Artificial Sequence: primer US-09-193-043-36
                               ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No. 6251395
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 36,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: CDS
LOCATION: (1)..(3453)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ENGTH: 3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                937
                                                                                                                                                                                        544 ATGCAATACTCGAACATCCTGAAGÁCCCATTTTACCTTCÁCTGÁÁTTCAAGAACATCCTG
                                                                                                                                                                                                                                                       484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG
                                                                                                                                                                                                                                                                                                                      ||||::: ||||::::||| ||||||||||:::
| 424 GACATTGCTTGATTGATTGATTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                                                649
                                                                                                                             604
                                                                                              75
                                                                                                                                                           55
                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                   20 TyrTyrpheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                  1 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCGCAGCATC 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA 936
TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                             GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 113
                                                                                          ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 94
                                                                                                                           GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-----
                                                                                                                                                                                                                      IlevalPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuGlnGlyIle 168
                                                              ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 708
                                                                                                                                                           AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09193043
                                                                                                                                                                                                                                                                                                                                                                                                                                 1.13e-07
138.50
47.83%
28.26%
15.41%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
                                                                                                                                  -----GGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               164
      768
                                                                                                                                648
                                                                                                                                                                                               60
                                                                                                                                                                                                                                                            543
                                                                                                                                                                                                                                                                                             39
                                                                                                                                                                                                                                                                                                                           483
                                                                                                                                                                                                                             54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-688-307A-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                   ; LOCATION: 1118 ; OTHER INFORMATION: Xaa = US-09-688-307A-36
                     Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 36, Application US/09688307A Patent No. 6432404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Gallatin, APPLICANT: Van der
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                               LOCATION: 464
OTHER INFORMATION: Xaa
NAME/KEY: misc_feature
LOCATION: 486
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                      OTHER INFORMATION: Xaa NAME/KEY: misc_feature LOCATION: 1118
                                                                                                                                                                                                 NAME/KEY: misc_feature LOCATION: 506
                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Rattus rattus
                                                                                                                                                   NAME/KEY: misc_feature LOCATION: 1117
                                                                                                                                                                                  OTHER INFORMATION: Xaa
                                                                                                                                                                                                                                OTHER INFORMATION: Xaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PatentIn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTCGCAGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuGlnGlyIle 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1997-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Michael W.
         1.13e-07
138.50
                                                                                                                                    11
                                                                                                                                                                                    a
                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          948
                                                                                                                                                                                                                                                                              = any
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.0
                                                                                       any
                                                                                                                                                                                    any
                                                                                                                                                                                                                                  any
                                                                                                                                    any
                                                                                       မှ
                                                                                                                                                                                                                                                                                or unknown
                                                                                                                                                                                    or unknown
                                                                                                                                                                                                                                  or unknown
```

```
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 6432404el Human Beta-2
FILE REFERENCE: 27866/36646
CURRENT APPLICATION NUMBER: US/09/688,307A
CURRENT FILING DATE: 2000-10-13
PRIOR APPLICATION NUMBER: 09/193,043
PRIOR PILLING DATE: 1998-11-16
PRIOR APPLICATION NUMBER: 08/605,672
PRIOR APPLICATION NUMBER: 08/605,672
PRIOR APPLICATION NUMBER: 08/173,497
PRIOR FILING DATE: 1993-12-23
PRIOR FILING DATE: 1993-12-3
PRIOR PILING DATE: 1993-12-3
PRIOR PILING DATE: 1993-12-3
PRIOR PILING DATE: 1994-12-3
PRIOR FILING DATE: 1994-13-65
PRIOR FILING DATE: 1994-13-65
PRIOR FILING DATE: 1994-12-21
PRIOR PILING DATE: 1994-12-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IOCATION: (1)..(3453)
OTHER INFORMATION: Description of Artificial Sequence: primer NAME/KBY: misc_feature
LOCATION: 361
OTHER INFORMATION: Xaa = any or unknown amino acid NAME/KBY: misc_feature
LOCATION: 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         132 ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             769 CCCCTGGAGTATAGTGATGCCATTCCCGCCGCAGACAAAGCT------GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   114 LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCATTGGCTCAGCTCCCCCACAGGÀCCACGTGTTCAAGGTÀGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ------AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 164
                                                                                                                                                                                                                                                or unknown amino
                                                                                                                                                            unknown amino
Length:
Matches:
                                                                                                                                                                                                                                                                                                                                            amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino
                                                                                                                                                                                                                                                                                                                                                                                                                                         amino
                                                                                                                                                         acid
                                                                                                                                                                                                                                                      acid
                                                                                                                                                                                                                                                                                                                                                acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   acid
                                                                                                                                                                                                                                                                                                                                                                                                                                            acid
      3528
52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                879
```

```
Sequence 36, Application US/09350259
Patent No. 6620915
GENERAL INFORMATION:
APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 6620915el Human 2
FILE REFERENCE: 27866/3504
CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/193,043
EARLIER APPLICATION NUMBER: 09/173,497
EARLIER APPLICATION NUMBER: 09/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1994-18-23
EARLIER FILING DATE: 1994-18-21
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER FILING DATE: 1994-18-21
EARLIER APPLICATION NUMBER: 08/262,652
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
NUMBER: 0F SEQ ID NOS: 114
SOPTWARE: PATENTIN Ver: 2.0
SEQ ID NO 36
LENGTH: 3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-350-259-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTCGCAGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuGlnGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCATTGGCTCAGCTCCCCCACAGGÁCCACGTGTTCAAGGTÁGGCAAC---TTTGCAGCÁ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT------GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThrTyrMetH1sGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGCAATACTCGAACATCCTGAAGACCCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAAGGGACTTTGCCCAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      47.83%
28.26%
15.41%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 x US-09-688-307A-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indele:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36
71
25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ----GCCCTG 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB;
                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                   RESULT 14
US-08-485-618-54
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Description of US-09-350-259-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                               Sequence 54, Application US/08485618 Patent No. 5728533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Rattus rattus FEATURE: NAME/KEY: CDS LOCATION: (1)..(3453) FEATURE:
                                                                                   GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5728533el
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
                 CITY:
                                                     STREET:
 COUNTRY:
                                                   ADDRESSEE: Marshall, O'Toole, STREET: 233 South Wacker Driv.
                                                                                                                                                                                                                                                                                          937
                                                                                                                                                                                                                                                                                                                            165
                                                                                                                                                                                                                                                                                                                                                                880
                                                                                                                                                                                                                                                                                                                                                                                                    149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   604 GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         544 ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        424 GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCCAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                 Chicago
: Illinois
                                                                                                                                                                                                                                                                                        CTTCGCAGCATC 948
                                                                                                                                                                                                                                                                                                                          LeuGlnGlyIle 168
                                                                                                                                                                                                                                                                                                                                                                ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlyTyrArgThrAla---SerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle 19
                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-------
United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.13e-07
138.50
47.83%
28.26%
15.41%
                                                                                                                                                                                                                                                                                                                                                                                               AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 164
                                                       Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              x US-09-350-259-36 (1-3528)
                                                       Gerstein, Murray
e, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Artificial Sequence: primer
                                                                                                                               Human
                                                                                                                             Ŋ
                                                                                                                           Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3528
52
36
71
25
                                                                      β<sub>1</sub>
                                                                        Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ------GCCTG
```

768

543 39 483

54

936

164 948 148

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-2_COPY_44_216 (1-173) x US-08-485-618-54 (1-3597)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; NAME/KEY:
; LOCATION:
US-08-485-618-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 54
SEQUENCE CHARACTERISTICS:
LENGTH: 3597 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE:
                                                                                                                                                         673
                                                                                                                                                                                                                              613
                                                                                                                                                                                                                                                                                                    553
                                                                                                                                                                                                                                                                                                                                                                           493
                                                                                   718
                                              95
                                                                                                                   75
                                                                                                                                                                                          55
                                                                                                                                                                                                                                                                 40
                                                                                                                                                                                                                                                                                                                                        20
           TCCCGTAAAAGTĠĊĊAAGAAGATCCTCCTTGTCATCÁĊÁĠÁTĠĠĠCAGAAATACAGAĠÁĊ
                                                                                                                                                                                                                                                                                                    AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTTGCGAGCACCAGCACCTTGTTCTCCCCTG 612
                                                                                                                                                                                                                                                                                                                                  TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 39
                                                                                                                                                                                                                                                                                                                                                                           AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                            GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 113
                                                                                ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 777
                                                                                                                                                                                                                                                             IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-----
                                                                                                                   ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 94
                                                                                                                                                          GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-----
                                                                                                                                                                                                                               ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                   AspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAsp 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.16e-07
138.50
47.83%
28.26%
15.41%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3597
52
36
71
25
                                                                                                                                                              ------GGCCTG
                                                                                                                                                                                                                                                                                                                                                                                 552
                                                                                                                                                                                                                                                                       54
                                                                                                                                                                                                                                                                                                                                                                                                                   19
                                                                                                                                                            717
                                                                                                                                                                                                                                     672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 15
US-08-362-652-54
Percent Similarity:
Best Local Similarity:
Query Match:
                                                       Score:
                                                                                       Alignment Scores:
                                                                                                                              US-08-362-652-54
                                                                      Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 54, Applicat Patent No. 5766850 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/286,889
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,559
REFERENCE/DOCKET NUMBER: 27866/3239:
                                                                                                                                                                                                                                                                                                            TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5766850el
                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                  MOLECULE TYPE:
                                                                                                                                               NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Chicago
STATE: Illinois
COUNTRY: United States
                                                                                                                                                                                                                                     LENGTH: 3597 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1006 CTTCGCAGCATC 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   889 CGTTATGCTATTGGGGGGGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              949 ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        838 CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT------GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    132 ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         114 LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuGlnGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/08362652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E: Marshall, O'Toole, Gerstein, Murray & Borun
233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                        linear
                                                                                                                                                                                                   CDNA
 1.16e-07
138.50
47.83%
28.26%
15.41%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US/08/362,652
                                                                                                                                                                                                                                                                                                                54
                                                                                                                                                                                                                                                                                                                                                                                                       27866/32391
                                                       Length:
Matches:
                      Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human
     Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 Integrin Alpha Subunit
```

Score:

ર્ 밁 á 밁 Ś 망 á 밁 Ś 밁 á

```
Search completed: December 18, 2005, 07:34:43 Job time : 133.458 secs
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                           á
                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                          5
                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              昂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-2_COPY_44_216 (1-173) x US-08-362-652-54 (1-3597)
                                                                          1006 CTTCGCAGCATC 1017
                                                                                                                                                                                                                                                                                                                                                               95 GlyTyrArgThrAla---SerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp 113
::::::|||
:::::::|||
778 TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC 837
                                                                                                          165 LeuGlnGlyIle 168
                                                                                                                                                                    889 CGTTATGCGATGGGAGAATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC 948
                                                                                                                                                                                                                                               132 ValTyrCygValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle--- 148
                                                                                                                                                                                                                                                                                           838 CCCCTGGAGTATAGTGATGCCCGCCGCAGACAAAGCT------GGCATCATT 888
                                                                                                                                                                                                                                                                                                                             114 LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             673 GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-------GGCCTG 717
                                                                                                                                             949 ACCATTGGCTCAGCTCCCCCACAGGÁCCÁCGTGTTCAAGGTÁGGCAAC---TTTGCAGCÁ 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                       ||||||
718 ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   613 ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          553 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75 ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              55 AppArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40 IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           54
```

THIS PAGE BLANK (USPTO)

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -MODEL-frame+_p2n.model -DEV-xlh
-Q=/Cg12_1/USP70_spco1/US09970076/runat_14122005_111850_20999/app_query.fasta_1.2410
-Q=/Cg12_1/USP70_spco1/US09970076/runat_14122005_111850_20999/app_query.fasta_1.2410
-DB=188886_Patente_NA_-OPPT-framenate_TRAMS-101_-MINMATCH=0.1 -LOOPEL=0
-LOOPEXT=0-UITS=5it8_START-1 -END=-1 -MARKIX=blosum62_TRAMS-buman40.cdi
-LIST=45_-DCCALIGN=200_-THR_SCORE=pct_-THR_MX=100_-THR_MIN=0_-ALIGN=15
-MODE=LOCAL_-OUTFMT=pto_-NORMH=sxt_-HEAPSIZE=500_-MILLEN=0_-MAXLEN=2000000000
-USER=US09970076_@CGN_1_1_535_@runat_14122005_111850_20999_-NCPU=6_-ICPU=3
-NO_MMAP_-LARGEQUERY_-NEG_SCORES=0_-WAIT_-DSPELOCK=100_-LONGLOG
-DEV_TIMEOUT=120_-MARN_TIMEOUT=30_-THRADS=1_-XGAPEXT=0_-XGAPEXT=0.5_-FGAPOD=6
-PGAPEXT=7_-YGAPOP=10_-YGAPEXT=0.5_-DELOP=6_-DELEXT=7_-PGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0_-FGAPOX=0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Command line parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.
score grea
and is der
                                                                 158
141.5
141.5
                                                                                                                                                                                                                                                                                                                          Score
                                                                                                                                                                943
542
478
478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, s derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Xgapop 10.0,
Ygapop 10.0,
Fgapop 6.0,
Delop 6.0,
         100.0
57.5
50.7
50.7
16.8
15.0
15.0
                                                                                                                                                                                                                                                                                                                          Macch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1303057 seqs, 888780828 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GFDLYFILDKSGSVLHHWNE......DGFQALQGIIHSILKKSCIE 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2_COPY_42_222
943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          December 18, 2005, 07:01:37; Search time 127.075 Seconds
                                                                                                                                                                                                                                                                                                                                                       Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /cgn2 6/ptodata/1/ina/1_COMB.seq:*
/cgn2 6/ptodata/1/ina/5_COMB.seq:*
/cgn2 6/ptodata/1/ina/6A_COMB.seq:*
/cgn2 6/ptodata/1/ina/6B_COMB.seq:*
/cgn2 6/ptodata/1/ina/6B_COMB.seq:*
/cgn2 6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2 6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2 6/ptodata/1/ina/RE_COMB.seq:*
/cgn2 6/ptodata/1/ina/RE_COMB.seq:*
                                                                                                                                                                                                                                                                                                                          Length
      1609
2234
1492
1492
3528
3528
3528
3528
                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           dsing frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Xgapext
Ygapext
Fgapext
Delext
   US-09-620-312D-8
US-10-104-047-669
US-09-774-528-297
US-10-120-988-297
US-09-799-451-250
US-08-286-889-36
US-08-362-652-36
US-08-362-652-36
                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7.05
7.05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (without alignments)
2531.884 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2606114
Sequence 8, Appli
Sequence 65, App
Sequence 297, App
Sequence 297, App
Sequence 36, Appl
                                                                                                                                                                                                                                                                                                                          Description
```

45	44	43	42	41	40	39	3 8	37	36	35 5	34	ω G	32	ω L	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	
'n	'n	'n	'n	Ņ	ε.	8	8		8	80	œ	ω.	œ	Θ.	8		œ	8	Θ.	œ	œ		141.5		_					41.	41.		141.5	٠	1
•	14.1	•	•	٠	•	•		•	٠	14.7	•	•			•		•	•		•	٠	•	15.0		•	•				•		•		•	
12	2	59	53	53	53	9	80	80	80	80	80	8	8	51	51	5	51	51	13	51	51	51	3597	ទ	59	ŝ	59	59	59	59	52	52	52	52	
w	w	w	9	σ	N	w	w	w	N	N	N	N	N	w	ω	w	N	N	N	N	N	N	w	w	w	N	N	N	N	N	w	w	w	N	
-09-023-655-1	09-809-517A-3	-09-023-655-11	4399-	-US96-01314-4	08-476-062A	-09-350-25	-09-688-307A-	-193-043-5	-08-943-363-5	-08-482-293A	-08-605-672-5	-08-362-652-5	-485-618-5	-09-350-259-4	-09-688-307A-	-09-193-043-4	-08-943-363-4	-08-482-29	-08-605-672-4	-08-362-652-4	-08-485-618-4	-08-286-889-4	Ġ	-09-688-307A-	-09-193-043-5	-08-943-363-5	-08-482-293A-	-08-605-672-5	-08-362-652-5	-485-618-5	-09-350-25	-09-688-307A-	-09-193-043-3	-08-943-363-3	
Sequence	ø	Sequence	4	equer	eque	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	
8, A	,7	147, A	542439	0, App	0, App	2, App	2, App	2, App	2, App	52, Appl	2, App	2, App	Ñ	5, App	5, App	5, App	, App	, App	, App	, App	<b>ن</b>	5, App	54, Appl	4, App	4	4, App	4	4, App	4	4, App	6, App	,	φ,	6, App	•

## ALIGNMENTS

```
RESULT 1

US-09-620-312D-8

Sequence 8, Application US/09620312D

Patent No. 6569662

GENERAL INFORMATION:

APPLICANT: Tang, Y. Tom

APPLICANT: Liu, Chenghua

APPLICANT: Wehrman, Tom

APPLICANT: Wang, Yonghong

APPLICANT: Wang, Jian-Rui

APPLICANT: Wang, Jian-Rui

APPLICANT: Wang, Jian-Rui

APPLICANT: Wang, Dunrui

APPLICANT: Wang, Dunrui

APPLICANT: Wang, Zhiwei

APPLICANT: Wang, Zhiwei

APPLICANT: John Tillinghast

APPLICANT: Wang, Zhiwei

APPLICANT: John Tillinghast

APPLICANT: Doff NUMBER: 09/6201

TITLE OF INVENTION: NO. 6569662e1 Nucleic Acids and

TITLE OF INVENTION: NO. 659662e1 Nucleic Acids and

TITLE OF INVENTION: NO. 659662e1 Nucleic Acids and

TITLE OF INVENTION: NO. 65962e1 Nucleic Acids and

TITLE OF INVENTION: NO. 6
```

```
RESULT 2
US-10-104-047-669

JS-10-104-047-669

REQUENCE 669, Application US/10104047

Patent No. 6943241

GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_42_222 (1-181)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores: Pred. No.:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: NO. 6943241el full lengt
FILE REFERENCE: H1-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE:
PRIOR FILING DATE:
PRIOR FILING DATE:
NUMBER OF SEQ ID NOS: 4096
SOFTWARE: PATENTIN Ver. 2.1
                                                                                                                                                 밁
                                                                                                                                                            ş
                                                                                                                                                                                밁
                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-620-312D-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 8
LENGTH: 1609
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
NAME/KEY: CDS
LOCATION: (309)..(1202)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                              672
                                                                                                                                                                                                                                                                                                                                                                                   612
                                                                                                                                                                                                                                                                                                                                                                                                                         552
                                                                                                                                                                                                                                                                                                                                                                                                                                                              492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    432
                                                                                                                                                 972
                                                                                                                                                                  181
                                                                                                                                                                                      912
                                                                                                                                                                                                                             852
                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                  792
                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                                                                18
                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glu
                                                                                                                                                                                                                                                                                                       IleargGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                        GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCCTGCACCACTGGAATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu
                                                                                                                                                                                      AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                  GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAA
                                                                                                                                                                                                                                                                             GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys
                                                                                                                                                                                                                                                                                                                                              GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA
                                                                                                                                                                                                                                                                                                                                                         GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr
                                                                                                                                                                                                                                                                                                                                                                                    ATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT
                                                                                                                                                 GAA
                                                                                                                                                                   181
                                                                                                                                                 974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.05e-113
943.00
100.00%
100.00%
                                                                     6943241el full length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           x US-09-620-312D-8 (1-1609)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0000
                                                                                                                                                                                                                                                                                       140
                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                  160
                                                                                                                                                                                                                                                                                                                                                                   100
                                                                                                                                                                                                                                                                                                                                                                                      671
                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                     851
                                                                                                                                                                                                                                                                                                            791
                                                                                                                                                                                                                                                                                                                                                731
                                                                                                                                                                                          971
                                                                                                                                                                                                                               911
                                                                                                                                                                                          RESULT 3
US-09-774-528-297
                                                                                                                                                                                                                                                            뭉
                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-104-047-669
                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                       밁
                                                                                                                                                             Sequence 297, Application US/09774528 Patent No. 6743619 GENERAL INFORMATION:
                                                                                                                                                    GENERAL INFO
                                                                                APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
      APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
TITLE OF IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             No.:
                                                                                                                                                                                                                                                            1069
                                                                                                                                                                                                                        1129
                                                                                                                                                                                                                                           162
                                                                                                                                                                                                                                                                                142
                                                                                                                                                                                                                                                                                                                                                                              895
                                                                                                                                                                                                                                                                                                                      122
                                                                                                                                                                                                                                                                                                                                        949
                                                                                                                                                                                                                                                                                                                                                            102
                                                                                                                                                                                                                                                                                                                                                                                                                                                         775
                                                                                                                                                                                                                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                                                                                                                      62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42
     T: Drmanac, Radoje T.
INVENTION: No. 6743619el
INVENTION: Polypeptides
                                  Asundi Vinod
Ren, Feiyan
Ren, Feiyan
Zhang, Jie
Zhao, Qing A.
Yang, Yonghong
Yue, Aidong J.
Wehrman, Tom
Wang, Jian-Rui
Wang, Dunrui
                                                                                                                                 Zhou, Ping
Goodrich, Ryle
                                                                                                                Liu, Chenghua
Asundi, Vinod
```

Nucleic

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-2_COPY_42_222 (1-181) x US-10-104-047-669 (1-2234)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 669
LENGTH: 2234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 2234
TYPE: DNA
ORGANISM: Homo
                                                                                                               1009 AAAGAGGCAAAGATATCCAGGTCACTTGGGGCTAGTGTTTATTGTGTTGGTGTCCTTGAT 1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                        655 TTTGATCTCCTCCTGGACAAGTCTGGGAGTGTGGCAAATAACTGGAATTGAAATT
                                                                                                                                                                                                                                                                                   835 AGTADAGGCTTGGAGGATTTAADACGTGTTAGTCCAGTAGGAGAGACATATATCCATGAA
                                                                                                                                                                                                                                                                                                                                                                                                715 TATAATTTCGTACAGCAACTTGCGGAGAGATTTGTGAGCCCTGAAATGAGATTATCTTTC
                                                                                                                                                                                                                                                                                                                                                                                                               22 TyrTyrPhevalGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 PheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIle
ArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp 141
                                                                                                                                                                       SerVallleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu 121
                                                                                                                                                                                                                            ĠĠĀCTŅĀĀGCTĀĠĊĠĀĀTĠĀĀĊĀĀĀŤŤ-----CAGĀĀĀGCAGGĀĠĊĊTTGĀĀĀĀĊĊTCC
                                                                                                                                                                                                                                           GlyPheGluArgAlaSerGluGlnIleTyrTyrGluAenArgGlnGlyTyrArgThrAla 101
                                                                                                                                                                                                                                                                                                     ArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGlu
                                                                                                                                                                                                                                                                                                                                           ATTGTGTTTTTCTCAAGCAACTATTATTTTGCCATTAACTGGAGACAGAGGCAAAATC
                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.34e-60
542.00
78.89%
59.44%
57.48%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2234
107
36
2
                                                                                                                                                                            1008
                                                                                                                                                                                                                                    948
                                                                                                                                                                                                                                                                                         894
                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                               834
                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                       77,
                                                                                                                                                                                                                                                                                                                                                                                                                                41
                                                                                                                                                                                                                                                                                                                                                                                                                                                            714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21
```

```
RESULT 4

US-10-120-988-297

Sequence 297, Application US/10120988

Patent No. 6919193

GENERAL INFORMATION:

APPLICANT: Tang, Y. Tom
APPLICANT: Liu, Chenghua
APPLICANT: Liu, Chenghua
APPLICANT: Ren, Feiyan
APPLICANT: Mang, Dunrui
APPLICANT: Drmanac, Radoje T.

PAPLICANT: Drmanac, Radoje T.

TITLE OF INVENTION: No. 6919193el Nucleic Aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: 802
CURRENT APPLICATION NUMBER: US/09/774,528
CURRENT FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
SOFTWARE: pt_FL_genes Version 2.0
SEQ ID NO 297
LENGTH: 1492
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (79)...(1434)
US-09-774-528-297
                                                                                                                                                                                    밁
                                                                                                                                                                                                     á
                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_42_222 (1-181) x
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                      430
                                                                                                                                                                                                                                                                                        370
                                                                                                                                                                                                                                                                                                                                          310
                                                                                                                                                                                    490
                                                                                                                                                                                                                                                              156
                                                                                                                                                                                                                                                                                                               136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTCAGTCATGTACTGAA
                                                                                                                                                                                                   LysLysSerCysIleGlu
                                                                                                                                                                                                                                                   HisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 175
                                                                                                                                                                                                                                                                                       CyeValGlyValLygAepPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAsp 155
                                                                                                                                                                                                                                                                                                                                                      LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 135
                                                                                                                                                                                                                                                                                                                                                                                           AspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                      CAAGTTTTCCCTGTCAAAGGTGGATTT
                                                                                                                                                                                                                                                                                                                                          GTGCCATCATATGCAGAGAAAGAGGCAAAGATATCCAGGTCACTTGGGGCTAGTGTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGACATATATCCATGAAGGACTAAAGCTAGCGAATGAACAAATT-----CAGAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAGACAGAGGCAAAATCAGTAAAGGCTTGGAGGATTTAAAACGTGTTAGTCCAGTAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.75e-52
478.00
77.71%
57.23%
50.69%
                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-774-528-297 (1-1492)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; LENGTH: 1492
; TYPE: DNA
; ORGANISM: Homo saj
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (79)...(;
US-10-120-988-297
    Sequence 250, Application US/
Patent No. 6783969
GENERAL INFORMATION:
APPLICANT: Tang, Y. Tom
APPLICANT: Zhou, Ping
APPLICANT: Goodrich, Ryle
APPLICANT: Asundi, Vinod
APPLICANT: Ren, Felyan
APPLICANT: Zhang, Jie
                                                                                                                     RESULT 5
US-09-799-451-250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                               S
                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2_COPY_42_222 (1-181)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: 802CON
CURRENT APPLICATION NUMBER: US/10/120,988
CURRENT FILING DATE: 2002-04-11
PRIOR APPLICATION NUMBER: 09/774,528
PRIOR FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
SOFTWARE: pt FL genes Version 2.0
SEQ ID NO 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      No.:
                                                                                                                                                             490
                                                                                                                                                                                                                                                                370
                                                                                                                                                                                                                                                                                        136
                                                                                                                                                                                                                                                                                                                  310
                                                                                                                                                                                                                                                                                                                                                                                                                      196
                                                                                                                                                                                                                                                                                                                                                                     250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        136 GGAGACAGAGGCAAAATCAGTAAAGGCTTGGAGGATTTAAAACGTGTTAGTCCAGTAGGA
                                                                                                                                                                                                                                                                                                                                                                                              96
                                                                                                                                                                                                                                                                                                                                                                                                                                                76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16
                                                                                                                                                            GCTCAGTCATGTACTGAA
                                                                                                                                                                                   LysLysSerCysIleGlu
                                                                                                                                                                                                              CysValGlyValLysAspPheAsmGluThrGlnLeuAlaArgIleAlaAspSerLysAsp 155
                                                                                                                                                                                                                                                                                                                                  LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 135
                                                                                                                                                                                                                                                                                                                                                                  GlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp 115
                                                                                                                                                                                                                                                                                                                                                                                                                      ATTAACTGGATTGAAATTTATAATTTCGTACAGCAACTTGCGGAGAGATTTGTGAGCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerPro
                                                                                                                                                                                                                                                              TGTGTTGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAG
                                                                                                                                                                                                                                                                                                                  GTGCCATCATATGCAGAGAAAAGAGGCAAAGATATCCAGGTCACTTGGGGGCTAGTGTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.75e-52
478.00
77.71%
57.23%
50.69%
                                                                                                           US/0979945
                                                                                                                                                                                   181
                                                                                                                                                            507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             x US-10-120-988-297 (1-1492)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1492
95
34
35
```

135

```
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6783969el Nucleic Ac
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 803
CURRENT FILING DATE: 2001-03-05
CURRENT FILING DATE: 2001-03-05
NUMBER OF SEQ ID NOS: 948
SOPTWARE: pt_FL_genes Version 2.0
SEQ ID NO 250
LENGTH: 3981
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_42_222 (1-181) x US-09-799-451-250 (1-3981)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                        RESULT 6
US-08-286-889-36
                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ÚS-09-799-451-250
                                                                                                                                                                                                                                                                                                             Sequence 36, Application US/08286889 Patent No. 5470953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Gallatin, W. Mich
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5470953el Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: CDS
LOCATION: (297)..(1118)
                                                                                                                                                          STREET: 225
STREET: 1111nois
Thre: Illinois
Thrited
                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC compatible
COMPUTER: ESM PC POS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 5.
CORRESPONDENCE ADDRESS:
                                                                                                                                                          COUNTRY: United States
                                       FILING DATE:
                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    152 AgpSerLygAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIle
                                                                                                                                                                                                                                                                                                                                                                                                 172 HisserlleLeuLysLysSerCysIleGlu 181
                                                                                                                                                                                                                                                                                                                                                                                  63
                                                                                                                                                                                                                                                                                                                                                                                                                                     w
                                                                                                                                                 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                      GACAGTAAGGATCATGTTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Xue, Aidong J.
Zhao, Qing A.
Wang, Jian-Rui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wehrman, Tom
Ghosh, Reena
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Yang, Yonghong
Wehrman, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wang, Dunrui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wang,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chen, Rui-hong
Wang, Zhiwei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ma, Yunqing
Yamazaki, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wang,
                                                                                                                                                                                                     E: Marshall, O'Toole, Ge
233 South Wacker Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5.07e-10
158.00
100.00%
100.00%
16.76%
 S
                                                      US/08/286,889
 08/173,497
                                                                                                                                                                                                        Gerstein, Murray & Borur
e, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                  Version
                                                                                                                                                                                                                                                                                                                                                                                     92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Acids
                                                                                                                                                                                                                                                            2 Integrin Alpha Subunit
                                                                                  #
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   171
                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
     RESULT 7
US-08-485-618-36
                                                                 S
                                                                                                片
                                                                                                                        8
                                                                                                                                                      밁
                                                                                                                                                                            Ś
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY:
; LOCATION:
US-08-286-889-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_42_222 (1-181) x US-08-286-889-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 3528 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Хо.
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 938,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 3528 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |||::: ||||:::::||| |||||||||:::
424 GACATTGCTTCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                                                                                                                                                                                                                                                                     116
                                                                                                                                                                                                                                                                                                                                                                                                               649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          544 ATGCAATACTCGAACATCCTGAAGÁCCCATTTTACCTTCÁCTGÁÁTTCAAGAACATCCTG 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG
                                                                                980
                                                                                                                                                                820
                                                                                                                                                                                            134 ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                               769
                                                                                                                                                                                                                                                                                                                             709
937
                                      167
                                                                                                                                                                                                                                                                                                                                                          97 GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                   77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                42 IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA------GGCCTG 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TyrTyrpheValGluGlnLeuAlaHisLyspheIleSerProGlnLeuArgMetSerPhe 41
                                   LeuGlnGlyIleIleHisSerIleLeuLysLys 177
                                                                                                                                                                                                                                            CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----
                                                                                                                                                                                                                                                                                LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle 133
                                                                                                                                                                                                                                                                                                                             TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC 768
                                                                                                                                                                                                                                                                                                                                                                                                             ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 708
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC--
                                                                                                                                                              CGTTATGCTATTGGGGGGGGGAGATGCCTTCCAGGAGCCCACTGCCCCTGAAGGAGCTGAAC 879
CTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6.12e-08
141.50
47.64%
27.75%
                                                                                                                    -AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27866/32168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   35
38
25
25
                                                                                                                                                                                                                                                     -GGCATCATT
```

483

56

150

619

936

150 819 133

708

```
무
                              á
                                                                        밁
                                                                                                      ঠ
                                                                                                                                                 В
                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                       US-09-970-076-2_COPY_42_222 (1-181) x US-08-485-618-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                           ;
US-08-485-618-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELBE...
TELESTAX: 25-3856
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 30.
SEQUENCE CHARACTERISTICS:
LENGTH: 3528 base pairs
LENGTH: 3528 base pairs
TYPE: nucleic acid
TYPE: Single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 36, Application US/08485618 Patent No. 5728533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5728533el Human
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PILING DATE: 5-AUG-1:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                  Х
О
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET:
544
                                                                                                                                                   424
                                                                        484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCCCCTG
                                    42
                                                                                                          22 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 41
                                                                                                                                                                                     3 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60606-6402
ATGCAATACTÓGAACATCCTGAAGÁÓÓCATTTTACCTTCÁCTGÁÁTTCAAGAACATCCTG 603
                                                                                                                                                 GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                  IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                           1..3456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDNA
                                                                                                                                                                                                                                                                                    6.12e-08
141.50
47.64%
27.75%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27866/32797
                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                      Mismatches:
Indels:
                                                                                                                                                                                                                                                                    Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                    3528
53
38
75
25
                                                                        543
                                    56
                                                                                                                                                     483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
US-08-362-652-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 36, Application US/08362652
Patent No. 5766850
GENERAL INFORMATION:
                                                                          TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/362,65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MERAL INFORMATION: W. MICHAEL APPLICANT: Gallatin, W. MICHAEL APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5766850el
                                                                                                                                                                                                                         APPLICATION NUMBER: US 0 FILING DATE: 5-AUG-1994 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 23-DEC-1993
                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                 TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                      FILING DATE: 23-DEC-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 9:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 20.
STREET: 71linoi
                                                                                                                                                                       NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
CLASSIFICATION:
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
                  LENGTH: 3528 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                134 ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  604 GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   167 LeuGlnGlyIleIleHisSerIleLeuLysLys 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           880 ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      820 CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             709 TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGAGTGGGCAGAAATACAGAGAGC 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       649 ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                769 CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT------GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97 GlyTyrArgThrAla---SerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ĊŢŢĊĠĊĄĠĊĄŢĊĊĄĠĄĠĠĊĄĄĊŢŢĊĄĠĠĄĠĄĄ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ----AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 166
                                                                                                                                                                                                                                                                                                                                                                                                                                               Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                      US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                           US/08/362,652
                                                                                                                                                                                                                                                                                                                              08/173,497
                                                                                                                                                                       27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human 2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----GGCCTG 648
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; NAME/KEY:
; LOCATION:
US-08-362-652-36
                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2_COPY_42_222 (1-181) x US-08-362-652-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score:
                                                                                                                                                                                                                              RESULT 9
US-08-605-672-36
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                           Sequence 36, Application US/08605672
Patent No. 5817515
                                                           GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5817515el Human 2 Integrin Alpha
TITLE OF SEQUENCES: 103
CORRESPONDENCE ADDRESS: 103
CORRESPONDENCE ADDRESSE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: 11
MOLECULE TYPE:
FEATURE:
                COUNTRY:
                                STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       544 ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        604
                                                                                                                                                                                                                                                                                                            167
                                                                                                                                                                                                                                                                                                                                                                                                                                           134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         116 LeuPhePheTyrserGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ω
                              Chicago
: Illinois
RY: United States 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AspLeuTyrPhelleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                         ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-------GGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCCTG 543
                                                                                                                                                                                                                                                                                                          LeuGlnGlyIleIleHisSerIleLeuLysLys 177
                                                                                                                                                                                                                                                                                                                                                                                                            CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGGCCCACTGCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCCGTAAAAGTĠĊĆAAGAAGATCCTCCTTGTCATCAĊÁĠAŤĠĠĠCAGAAATACAGAĠĀĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu--------
                                                                                                                                                                                                                                                                               CTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
                                                                                                                                                                                                                                                                                                                                              ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDNA
                                                                                                                                                                                                                                                                                                                                                                         ----AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6.12e-08
141.50
47.64%
27.75%
15.01%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
                                                                                                                                                                                                                                                                                   969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3528
53
38
75
25
                                                                                                                                  Alpha
                                                                                                                                                                                                                                                                                                                                                                                   166
                                                                                                                                                                                                                                                                                                                                                                                                                 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41
                                                                                                                                                                                                                                                                                                                                                   936
                                                                                                                                                                                                                                                                                                                                                                                                                                                150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
     S
                                                                   Ş
                                                                                                   밁
                                                                                                                              á
                                                                                                                                                                   밁
                                                                                                                                                                                              S
                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-2_COPY_42_222 (1-181) x US-08-605-672-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-605-672-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 3528 has 1790p.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 01 FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION:
                                                                                                                                                                                                                                   544 ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG 60:
                                                                                                                                                                                                                                                                                                                                                                  424 GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                                                                                     649
                                                                                                                                                                       604
                                                                                                                                                                                                                                                                                                    484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 543
      116 LeuPhePheTyrSerGlu---
                                                                                                                                  77 ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                     57
                                                                                                                                                                                                                                                                42 IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu--------
                                                                                                                                                                                                                                                                                                                           22 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 41
                                                                                                                                                                                                                                                                                                                                                                                             3 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                  AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 76
                                                                   GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 115
                                                                                                   GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-
                                      TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAGC 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6.12e-08
141.50
47.64%
27.75%
15.01%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27866/32684
     -ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3528
38
38
25
10
                                                                                                                                                                          -GCCTG 648
```

21

41

```
RESULT 10
US-08-482-293A-36
; Sequence 36, Application US/08482293A
norant No. 5831029
norant No. 5831029
                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                               US-08-482-293A-36
 Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pacent No. 5831029
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5831029el Human
NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                               TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                          NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866
TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
                                       8
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 0 FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Chicago
                                                                                                                  COCATION:
                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                             ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  769
                                                                                                                                                                                                                             nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle--- 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAAGCT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuGlnGlyIleIleHisSerIleLeuLysLys 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCATTGGCTCAGCTCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ------AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Illinois
                                                                                                                                                                                                                           3528 base pairs ucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              United States
                                                                                                                                  CDS
                                                                                                                                                                                                        Bingle
6.12e-08
141.50
47.64%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US 08/173,497
                                                                                                                                                                                                                                                                                       36:
                                                                                                                                                                                                                                                                                                                                                                                    27866/32684
Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-943-363-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_42_222 (1-181) x US-08-482-293A-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                  PATENT NO. 5837478
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 36, Appr. Sequence 36, Appr. No. 5837478
                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/943,36:
FILING DATE: 530 CLASSIFICATION: 530 PRIOR APPLICATION DATA: APPLICATION NUMBER: 1
                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole,
                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                             STREET: 233 Sc
CITY: Chicago
                                                                                                                                                                                                             ZIP:
                                                                                                                                                                                                                             STATE: Illinois
COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          167 LeuGlnGlyIleIleHisSerIleLeuLysLys 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  880 ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           820 CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         134 ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             709 TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              424 GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      937 CTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        116 LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    604 GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             544 ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42 IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22
                                                                                                                                                                                                             60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlyTyrArgThrAla---SerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT------GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspLeuTyrPheIleLeuAspLysSerGlySerVal----LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/08943363
                                                                                                                                                                                                                                                                                       233 South Wacker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27.75%
15.01%
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
 US 08/173,497
                                                                             US/08/943,363
                                                                                                                                                                                                                                                                                         Drive,
                                                                                                                                                                                                                                                                                       Gerstein, Murray &
e, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                Human
                                                                                                                  Version
                                                                                                                                                                                                                                                                                                                                                              2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        969
                                                                                                                  世
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25
10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -GGCCTG
```

166

936

879

150 819 133 768

648

```
á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                              밁
                                                                                            á
                                                                                                                              밁
                                                                                                                                                          S
                                                                                                                                                                                            밁
                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2_COPY_42_222 (1-181) x
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-943-363-36
 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 23-DEC-1993

PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/286,889
FILING DATE: 5-AUG-1994

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
PILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 3528 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          424
                                                                                                                                                                                                                                                             649
                                                                                                                                                                                                                                                                                                                            604
                                                                                                                                                                                                                                                                                                                                                                                            544
                                                                                                                                                                                                                              97
                                                                                                                                                                                                                                                                                                                                                          57
                                                                                                                                                                                                                                                                                                                                                                                                                          42
                                                                                                                                                                                                                                                                                            77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspLeuTyrPhelleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGlulle
                                                                                                                                                                                                                                                                                                                             GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-------GGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                        IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu--------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                     ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                            CCCCTGGAGTÄTÄGTGATGTCATTCCCGCCGCAGACAAGCT------GGCATCÄTT
                                                                                                                                                            LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                               TCCCGTAAAAGTĠĊĊAAGAAGATCCTCCTTGTCATCAĊAĠATĠĠĠCAGAAATACAGAGAC
                                                                                                                                                                                                                     GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 115
                                                                                                                                                                                                                                                                                                                                                       AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG
ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC--
                                                              CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                               ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG
                                                                                                                                                                                                                                                                                            ŢḥŗŢγŗMetHisGluĢļγPheGluArgAlaSerĢļuGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                                                                                            ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6.12e-08
141.50
47.64%
27.75%
15.01%
                       -AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-943-363-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           353
36
36
25
25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (1-3528)
      TTTGCAGCA
                                                                                                                                                                   133
                                                                                                                                                                                                                                                                 708
                                                                                                                                                                                                                                                                                                  96
                                                                                                                                                                                                                                                                                                                                 648
                                                                                                                                                                                                                                                                                                                                                               76
                                                                                                                                                                                                                                                                                                                                                                                                 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                             543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               41
                                                                      879
                                                                                                    150
      936
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-193-043-36
                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER APPLICATION NUMBER: 08/26,889
EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER FILING DATE: 1994-12-21
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
NUMBER: 0F SEQ ID NOS: 114
 밁
                              S
                                                                        밁
                                                                                                       S
                                                                                                                                             밁
                                                                                                                                                                                S
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_42_222 (1-181) x US-09-193-043-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Description US-09-193-043-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWALL SEQ ID NO 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 36 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OP INVENTION: NO. 6251395el Human 2
FILE REFERENCE: 27866/35004
CURRENT APPLICATION NUMBER: US/09/193,043
CURRENT FILING DATE: 1998-11-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Rattus :
FEATURE:
NAME/KEY: CDS
LOCATION: (1)..(3)
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36, App.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       937
                                                                                                                                                                                                                                                                                                544 ATGCAATACTCGAACATCCTGAAGACCCCATTTTACCTTCACTGAATTCAAGAACATCCTG 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                |||::: |||::::|| ||||||||||||:::
424 GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       167 LeuGlnGlyileIleHisSerIleLeuLysLys
 769
                                                                          709
                                                                                                                                                   649
                                                                                                                                                                                                                            604 GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA
                                                                                                                                                                                                                                                                                                                                                                       484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 543
                                                                                                              97
                                                                                                                                                                                     77
                                                                                                                                                                                                                                                              57
                                                                                                                                                                                                                                                                                                                                       42
                                                                                                                                                                                                                                                                                                                                                                                                        22 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDS
(1)..(3453)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----
                                                                                             GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 115
                                                                                                                                                                                 ThrTyrMetH1eGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 96
                                                                                                                                                                                                                                                            AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 76
                                                                                                                                                                                                                                                                                                                                   IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu--------
                     LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle 133
                                                                        TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC 768
                                                                                                                                                 ||||||
ACCTACAGAGCACAGGGATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.12e-08
141.50
47.64%
27.75%
15.01%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/09193043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of Artificial Sequence: primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           969
       -GGCATCATT
                                                                                                                                                                                                                                 GCCTG
                                                                                                                                                                                                                               648
                                                                                                                                                                                                                                                                                                                                                                                                                                                      48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                 OTHER INFORMATION: Xaa NAME/KEY: misc feature LOCATION: 1118
OTHER INFORMATION: Xaa US-09-688-307A-36
                                                                                                      Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 13
US-09-688-307A-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   路
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT FILING DATE: 2000-10-13
PRIOR APPLICATION NUMBER: 09/193,043
PRIOR FILING DATE: 1999-11-16
PRIOR APPLICATION NUMBER: 08/605,672
PRIOR FILING DATE: 1996-02-22
PRIOR PPLICATION NUMBER: 08/173,497
PRIOR APPLICATION NUMBER: 08/173,497
PRIOR APPLICATION NUMBER: 08/286,889
PRIOR APPLICATION NUMBER: 08/286,889
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR FILING DATE: 1994-08-05
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR FILING DATE: 1994-12-21
PRIOR FILING DATE: 1994-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 36, Application US/09688307A Patent No. 6432404 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 464
OTHER INFORMATION: XAB =
NAME/KEY: misc_feature
TOCATION: 486
TOCATION: XAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 36
LENGTH: 3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 6432404el Human Beta-2
FILE REFERENCE: 27866/36646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1997-1 NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/688,307A CURRENT FILING DATE: 2000-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Rattus rattus
FEATURE:
NAME/KEY: CDS
LOCATION: (1)..(3453)
COTHER INFORMATION: Description of Artificial Sequence:
NAME/KEY: misc_feature
LOCATION: 361
OTHER INFORMATION: Xaa = any or unknown amino acid
                                                                                                                                                                                                                                                                             NAME/KEY: misc_feature
LOCATION: 1117
                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature
LOCATION: 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Xaa
                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Xaa =
                                                                                                                                                                                                                                                                                                                                          OCATION: 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        134 ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuGlnGlyIleIleHisSerIleLeuLysLys 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCATTGGCTCAGCTCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1997-10-03
  6.12e-08
141.50
47.64%
27.75%
15.01%
                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                 n
                                                                                                                                                                                         D
                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                            any
                                                                                                                                                                                         any
                                                                                                                                                                                                                                                    any
                                                                                                                                                                                                                                                                                                                  any
                                                                                                                                                                                                                                                                                                                                                                               any
                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                         ç
                                                                                                                                                                                                                                                       ę
                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                              or unknown
                                                                                                                                                                                         unknown
                                                                                                                                                                                                                                                                                                                    unknown
                                                                                                                                                                                                                                                                                                                                                                                 unknown
                                                                                                                                                                                                                                                       unknown
                                                                                   Length:
Matches:
                     Mismatches:
Indels:
                                                               Conservative:
                                                                                                                                                                                                                                                                                                                                                                                 amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                 amino
                                                                                                                                                                                         amino
                                                                                                                                                                                                                                                       amino
                                                                                                                                                                                                                                                                                                                    amino
                                                                                                                                                                                         acid
                                                                                                                                                                                                                                                                                                                    acid
                                                                                                                                                                                                                                                                                                                                                                                 acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                 acid
3528
53
38
75
25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-350-259-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/350,259
CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/13,043
EARLIER FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_42_222 (1-181) x US-09-688-307A-36 (1-3528)
                                                                                                      SEQ ID NO 36
LENGTH: 3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent No. 66209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 36,
                                                                                                                                                                    EARLIER FILING DATE: 1994-12-21
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Gallatin, Michael W. APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: NO. 6620915el Human 2 FILE REFERENCE: 27866/35004
                                                                                                                                                SOFTWARE: Patentin Ver.
                     FEATURE:
NAME/KEY: CDS
                                                               ORGANISM: Rattus rattus
                                                                                       TYPE: DNA
    OCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   167 LeuGlnGlyIleIleHisSerIleLeuLysLys 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               880 ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          134 ValTyrCysValGlyValLysAsp----PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   769 CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  709 TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     649 ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       544 ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           424 GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCCAGATG 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97 GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          77 ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              42 IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
    (1) .. (3453)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGTTATGCTATTGGGGGGGGGGAGATGCCTTCCAGGAGCCCACTGCCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA------GGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAsp 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/09350259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ---AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCATCATT
```

936

133 768

150 819 603

56

21

648

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
; OTHER INFORMATION:
US-09-350-259-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_42_222 (1-181) x US-09-350-259-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                    US-08-485-618-54
                                                                                                                                                                                                                                                                                                     RESULT 15
                                                                                                                                                            Patent No. 3'AULT
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5728533el
                                                                                                                                                                                                                                                  Sequence 54, Application US/08485618 Patent No. 5728533
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                   NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
ADDRESSE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                   ADDRESSEE: Mar
STREET: 233 So
CITY: Chicago
                                                   ZIP:
                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         424
                                                                                                                                                                                                                                                                                                                                                                                                      088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        484
                                                                                                                                                                                                                                                                                                                                        937
                                                                                                                                                                                                                                                                                                                                                                     167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22
                                                 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG
                                                                                                                                                                                                                                                                                                                                                                 LeuGlnGlyIleIleHisSerIleLeuLysLys 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCCGTAAAAGTĠĊĆAAGAAGATCCTCCTTGTCATCAĊAĠAŤĠĠĠCAGAAATACAGAĠĀĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu--------
                                                                                                                                                                                                                                                                                                                                   CTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                      ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAsp
                                                                                    Illinois
                                                                    United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6.12e-08
141.50
47.64%
27.75%
                                                                                                                                                                                                                                                                                                                                                                                                                                   -AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Artificial Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches:
Indels:
                                                                                                                                                                                      Human
                                                                                                                                                                                      N
                                                                                                                                                                                                                                                                                                                                         969
                                                                                                                                                                                      Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3528
53
38
75
25
                                                                                                                                                                                       Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -------GGCCTG
                                                                                                                                                                                         Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                           166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY:
LOCATION:
US-08-485-618-54
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2_COPY_42_222 (1-181) x US-08-485-618-54 (1-3597)
                           밁
                                                      S
                                                                                           밁
                                                                                                                    á
                                                                                                                                                            밁
                                                                                                                                                                                      8
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 54
SEQUENCE CHARACTERISTICS:
LENGTH: 3597 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,618
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Williams Jr., Joseph | REGISTRATION NUMBER: 38,659 | REFERENCE/DOCKST NUMBER: 27, TELECOMMUNICATION INFORMATION: TELEPHONE: 312,474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Jose
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
TOPOLOGY: lir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                              718
                                                                                                                                                                                                                             673
                                                                                                                                                                                                                                                                                           613 ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG 672
                                                                                                                                                                                                                                                                                                                                                            553 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                            |||::: |||::::|| ||||||||||||::::
                                                                                                                           97
                                                                                                                                                                                             77
                                                                                                                                                                                                                                                            57
                                                                                                                                                                                                                                                                                                                             42
                                                                                                                                                                                                                                                                                                                                                                                               22
                                                                                                                                                                                                                                                                                                                                                                                                                                                              w
                                                                                                                                                                                                                                                                                                                          IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu----------
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                           TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                               GlyTyrArgThrAla---SerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp 115
                                                                                                                                                                                         ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 96
                                                                                                                                                                                                                             GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-------GCCCTG 717
                                                                                                                                                                                                                                                         AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 76
                           CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT----
                                                        LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle 133
                                                                                           TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                            ||||||
ACCTACAGACAGCACAGGGATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40..3525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.29e-08
141.50
47.64%
27.75%
15.01%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 38
38
75
10
                                -GGCATCATT
```

밁 á 밁 Ş 밁 á В Ś 밁 á 밁 ঠ В S

밁 á 밁 Ş 밁 á

> 612 41

26

837

21

THIS PAGE BLANK (USPTO)

```
Command line parameters:

-MODEL=frame+ p2n.model -DEV=xlh
-Q-/Ggn2 | JUSPTO_spool|VE099970076/xunat_14122005_111850_20999/app_query.fasta_1.2410
-DB=Issued_patents NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOFCL=0
-LOOFEXT=0 -UNITS=51ts -START=1 -END=-1 -MARIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR SCORE=ptc -THR MAX=100 -THR MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000
-USER=US09970076 @CGN 1 1 535 @runat 14122005 111850 20999 -NCPU=6 -ICPU=3
-NO MMAP -LARGEQÜERY -NEG_SCORES=0 -MAIT -DSPELOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -MARN_TIMEOUT=30 -THREADS=1 -XCAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM protein -
                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
      970
550
486
486
179
141.5
141.5
                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                            Issued Patents NA:*

1: /cgn2_6/ptodata/1/ina/5_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCCOMB.seq:*
7: /cgn2_6/ptodata/1/ina/PCCOMB.seq:*
8: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*
9: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BLOSUM62
Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
        100.0
56.7
50.1
18.5
14.6
14.6
14.6
                                                                                                                                                                                                               Match Length
                                                                                                                                                                                                                                    Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_41_227
970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          December 18, 2005, 07:01:37 ; Search time 131.287 Seconds (without alignments) 2531.884 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1303057 seqs, 888780828 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGFDLYFILDKSGSVLHHWN.....LQGIIHSILKKSCIEILAAE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
        1609
2234
1492
1492
1981
3528
3528
3528
                                                                                                                                                                                                                 8
    US-09-620-312D-8
US-10-104-047-669
US-09-774-528-297
US-10-120-988-297
US-09-799-451-250
US-08-286-889-36
US-08-362-652-36
US-08-362-652-36
                                                                                                                                                                                                               Ħ
                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     . . . . . .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2606114
Sequence 8, Appli
Sequence 669, App
Sequence 297, App
Sequence 297, App
Sequence 250, App
Sequence 36, Appl
Sequence 36, Appl
Sequence 36, Appl
Sequence 36, Appl
                                                                                                                                                                                                               Description
```

```
138
138
138
138
138
138
138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141.5
141.5
141.5
141.5
141.5
141.5
    US-08-482-293A-36
US-09-193-043-36
US-09-193-043-36
US-09-350-259-36
US-09-350-259-36
US-08-485-672-54
US-08-485-889-45
US-08-485-889-45
US-08-485-889-45
US-08-485-889-45
US-08-485-889-45
US-08-485-889-45
US-08-485-872-45
US-08-93-193-043-45
US-08-93-193-043-45
US-08-93-193-043-45
US-08-93-193-043-45
US-08-93-193-043-45
US-08-93-193-043-45
US-08-93-193-043-45
US-08-93-193-043-45
US-08-93-193-043-52
US-08-93-193-043-52
US-08-93-193-043-52
US-08-93-193-043-52
US-08-93-193-043-52
US-09-188-307A-52
US-09-189-517A-37
US-09-023-655-1178
  Sequence 5
Sequence 5
Sequence 5
Sequence 5
Sequence 5
Sequence 5
Sequence 6
Sequence 6
Sequence 10
Sequence 10
Sequence 10
Sequence 10
Sequence 10
Sequence 10
                                                                                                                                                                                                                                                                                 Sequence
Sequence
                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
    36, Appl
36, Appl
36, Appl
54, Appl
55, Appl
45, Appl
45, Appl
45, Appl
52, Appl
52,
```

### ALIGNMENTS

```
NESULT 1

US-09-620-312D-8

Sequence 8, Application US/09620312D

Patent No. 6585662

GENERAL INFORMATION:
APPLICANT: Tang, Y. Tom
APPLICANT: Liu, Chenghua
APPLICANT: Lau, Chenghua
APPLICANT: Lau, Chenghua
APPLICANT: Chen, Feiyan
APPLICANT: Chen, Rui-hong
APPLICANT: Lao, Qing A.
APPLICANT: Lao, Qing A.
APPLICANT: Mang, Jian-Rui
APPLICANT: Wang, Yonghong
APPLICANT: Wang, Yonghong
APPLICANT: Mang, Jian-Rui
APPLICANT: Mang, Jian-Rui
APPLICANT: Mang, Dunrui
APPLICANT: John Tillinghast
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6569662el Nucleic Acids and
TITLE OF INVENTION: No. 6569662el Nucleic Acids and
TITLE OF INVENTION UNMBER: US/09/620,312D

CURRENT APPLICATION NUMBER: US/09/620,312D

PRIOR APPLICATION DATE: 2000-01-21

PRIOR APPLICATION DATE: 2000-01-21

PRIOR PILING DATE: 2000-01-21
```

```
RESULT 2
US-10-104-047-669
US-10-104-047-669

Sequence 669, Application US/10104047

Patent No. 6943241

GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
APPLICANT: HELIX RESEARCH INSTITUTE
CURTENT APPLICATION NOMBER: US/10/104,047

CURRENT FILING DATE: 2002-03-25

PRIOR APPLICATION NUMBER:
PRIOR APPLICATION NUMBER:
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; SEQ ID NO 8
; LENGTH: 1609
; TYPE; DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (309)..(1202)
US-09-620-312D-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                    ঠ
                                                                                                                                                                                                         ર્
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2_COPY_41_227 (1-187)
                                                                                                                                                   밁
                                                                                                                                                                                          밁
NUMBER OF SEQ ID NOS: 4096
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                      549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     429
                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                       669
                                                                                                                                                                                                                                                                                                                                                                                               609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             489
                                                                                                                                                    969
                                                                                                                                                                      181
                                                                                                                                                                                           909
                                                                                                                                                                                                             161
                                                                                                                                                                                                                                   849
                                                                                                                                                                                                                                                                          789
                                                                                                                                                                                                                                                                                                                729
                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                          41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleGluIleLeuAlaAlaGlu
|||||||||||||||
aTCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                       ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                            LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                   SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                          ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr 120
                                                                                                                                                                                                                                                                                                                                                       CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                   HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                               CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                           GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                          ĠŦĠAAŦĠAĊĠĠĊŦŦŦĊAĠĠĊŦĊŦĠĊAAĠĠĊAŦĊAŦĊĊAĊŦĊAAŦŦŦŦĠAAĠAĀĠŦĊĊŦĠĊ
                                                                                                                                                                                                                                                                         TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                    AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6.46e-116
970.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ×
                                                                                                                                                                       187
                                                                                                                                                     989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-620-312D-8 (1-1609)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1609
187
0
0
                                                                                                                                                                                                                                                                                               140
                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                                                                 899
                                                                                                                                                                                                                                                                                                                                                                                                                    80
                                                                                                                                                                                                                                                                                                                                                                                                                                        809
                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       488
                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                     908
                                                                                                                                                                                                                                                                            848
                                                                                                                                                                                                                                                                                                                   788
                                                                                                                                                                                                                                                                                                                                                          728
                                                                                                                                                                                              968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; SEQ ID NO 669
; LENGTH: 2234
; TYPE: DNA
; ORGANISM: Homo 6
; ORGANISM: 4047-669
                                                                                                                                                                                                   S
                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                片
                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                      밁
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores: Pred. No.:
                                APPLICANT:
             APPLICANT:
                                                                                                                                                                                       1189
                                                                                                                                                                                                                             1129
                                                                                                                                                                                                                                                                                                          1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     655
                                                                                                                                                                                                                                                                                                                                                                                                                                835
                                                                                                                                                                                                                                                163
                                                                                                                                                                                                                                                                                       143
                                                                                                                                                                                                                                                                                                                              123
                                                                                                                                                                                                                                                                                                                                                 949
                                                                                                                                                                                                                                                                                                                                                                                         895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             715
                                                                                                                                                                                                         183
                                                                                                                                                                                                                                                                                                                                                                     103
                                                                                                                                                                                                                                                                                                                                                                                                            83
                                                                                                                                                                                                                                                                                                                                                                                                                                                   63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         w
                                                                                   Liu,
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                       RESULT 3
US-09-774-528-297
; Sequence 297, Application US/09774528
; Patent No. 6743619
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2_COPY_41_227 (1-187)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PheaspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGACTAAAGCTAGCGAATGAACAAATT-----CAGAAAGCAGGAGGCTTGAAAACCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIle
                                                                                                                                                                                                                                                                                                                                   AppGlyPhoGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLyeSerCysIleGlu 182
                                                                                                                                                                                                                                                                                                                                                                          PheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsn 162
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAGÁGGCÁAAGATATCCÁGGTCACTTGGGGGCTAGTGTTTÁTTGTGTTGGTGTCCTTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu
|||:::||||||||||||||||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla 102
Ren, Feiyan
Zhang, Jie
Zhao, Qing A.
Yang, Yonghong
Xue, Aidong J.
Wehrman, Tom
Wang, Jian-Rui
                                                                                                                                                                                                                                                                                                                     GGTGGATTTCAGGCTCTTAAAGGAATAATTAATTCTATACTAGCTCAGTCATGTACTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTGGTGCCATCATATGCAGAG
                                                                                                                               Tang, Y. Tom
Zhou, Ping
Goodrich, Ryle
                                                                                                                                                                                                                                                               ATCCTA 1194
                                                                                                                                                                                                                                                                                         IleLeu 184
                                                                                                      Asund
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                    Chenghua
ndi, Vinod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.64e-61
550.00
79.12%
59.89%
56.70%
                                                                                                                                                              Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      x US-10-104-047-669 (1-2234)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2234
109
35
36
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22
```

```
RESULT 4
US-10-120-988-297
US-10-120-988-297
Sequence 297, Application US/10120988
Patent No. 6919193
GENERAL INFORMATION:
APPLICANT: Tang, Y. Tom
APPLICANT: Goodrich, Ryle
APPLICANT: Liu, Chenghua
APPLICANT: Ren, Felyan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Wang, Dunrui
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6743619el Nucleic Acids and
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 802
CURRENT APPLICATION NUMBER: US/09/774,528
CURRENT FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
SOFTWARE: pt_FL_genes Version 2.0
SEQ ID NO 297
LENGTH: 1492
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                     ક
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_41_227 (1-187)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-774-528-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: CDS
LOCATION: (79)..(1434)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                              310
                                                                                                                                                                                                                                                          370
                                                                                                                                                                                                                                                                                  137
                                                                                                                                                                                                                                                                                                                                       117
                                                                                                                                                490
                                                                                                                                                                                                    430
                                                                                                                                                                                                                             157
                                                                                                                                                                                                                                                                                                                                                                    250
                                                                                                                                                                                                                                                                                                                                                                                                                         196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            136
                                                                                                                                                                                                                                                                                                                                                                                             97
                                                                                                                                                                                                                                                                                                                                                                                                                                                 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17
                                                                                                                                                                                                                                                                                                                           LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 136
                                                                                                                                                                                                                                                                        CysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAsp
                                                                                                                                                                                                                                                                                                                                                                               GlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                       AspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAGACAGAGGCAAAATCAGTAAAGGCTTGGAGGATTTAAAAACGTGTTAGTCCAGTAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATAACTGGATTGAAATTTATAATTTCGTACAGCAACTTGCGGAGAGATTTGTGAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerPro
                                                                                                                                                GCTCAGTCATGTACTGAAATCCTA
                                                                                                                                                                 LysLysSerCysIleGluIleLeu
                                                                                                                                                                                                    HisValPheProValAsnAspGlyPheGlnAlsLeuGlnGlyIleIleHisSerIleLeu
                                                                                                                                                                                                                                                                                                              GTGCCATCATATGCAGAGAAAGAGGCAAAGATATCCAGGTCACTTGGGGCTAGTGTTTAT
                                                                                                                                                                                                                                                                                                                                                                    GGAGGCTTGAAAACCTCCAGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                         GAGACATATATCCATGAAGGACTAAAGCTAGCGAATGAACAAATT-----CAGAAAGCA
                                                                                                                                                                                                                                                        TGTGTTGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    eapiene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.16e-53
486.00
77.98%
57.74%
50.10%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           x US-09-774-528-297 (1-1492)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative: Mismatches: Indels:
                                                                                                                                                  513
                                                                                                                                                                         184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12334
4884
                                                                                                                                                                                                                                                                                                                                                                                             116
                                                                                                                                                                                                       489
                                                                                                                                                                                                                                                                                     156
                                                                                                                                                                                                                                                           429
                                                                                                                                                                                                                                                                                                               369
                                                                                                                                                                                                                                                                                                                                                                     309
                                                                                                                                                                                                                                                                                                                                                                                                                         249
                                                                                                                                                                                                                                                                                                                                                                                                                                                   96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA; ORGANISM: Homo sa; PEATURE: PEATURE: NAME/KEY: CDS; LOCATION: (79)...(US-10-120-988-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6919193el Nuclei.
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 802CON
CURRENT APPLICATION NUMBER: US/10/120,981
CURRENT FILING DATE: 2002-04-11
PRIOR APPLICATION NUMBER: 09/774,528
PRIOR FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
SOFTWARE: pt FL genes Version 2.0
SEQ ID NO 297
TENORUME 1400
                                                                                                                                                                                             S
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                          ठ
                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                               RESULT 5
US-09-799-451-250
                                                                                                                        밁
                                                                                                                                             S
                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                    용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-2_COPY_41_227 (1-187)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
            GENERAL INFORMATION:
APPLICANT: Tang, Y. To
APPLICANT: Zhou, Ping
                                                    Sequence 250, Application Patent No. 6783969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 1492
                                                                                                                                                  177
                                                                                                                                                                                                                                                                                     310
                                                                                                                                                                                                                                                                                                                                                                                                                                                 490
                                                                                                                                                                            430
                                                                                                                                                                                                     157
                                                                                                                                                                                                                                  370
                                                                                                                                                                                                                                                          137
                                                                                                                                                                                                                                                                                                               117
                                                                                                                                                                                                                                                                                                                                          250
                                                                                                                                                                                                                                                                                                                                                                                                196 GAGACATATATCCATGAAGGACTAAAGCTAGCGAATGAACAAATT-----CAGAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97
                                                                                                                                                                                                                                                                                                                                                                                                                         77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  37
                                                                                                                      LysLysSerCysIleGluIleLeu 184
:::||||||
GCTCAGTCATGTACTGAAATCCTA 513
                                                                                                                                                                                                HisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu
                                                                                                                                                                                                                                                                                                    LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 136
                                                                                                                                                                                                                               GlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAPATGAGATTATCTTTCATTGTGTTTTCTTCTCAAGCAACTATTATTTTGCCATTAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                  AspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg
                                                                                                                                                                            CAAGITITICCCIGICAAAGGIGGATTTCAGGCTCTTAAAGGAATAATTAATTCTATACTA
                                                                                                                                                                                                                                                                                      GTGCCATCATATGCAGAGAAAGAGGCAAAGATATCCAGGTCACTTGGGGGCTAGTGTTTAT
                                                                                                                                                                                                                                                                                                                                          GGAĞĞÜTTGAAAAĞÜTCCAĞTATCATAATTĞÜTÜTĞAÇAĞATĞĞÜAAGTTĞGACGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wang, Dunrus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.16e-53
486.00
77.98%
57.74%
50.10%
                                                                     US/09799451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-120-988-297 (1-1492)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and
```

369

176 429 116

195 96

135 56 75

76

309

```
SOFTWARE: pt_FL_genes Version 2.0
SEQ ID NO 250
LENGTH: 3981
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (297)..(1118)
                                                                                                                                                                                                                                                                                                                                                         RESULT 6
US-08-286-889-36
                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_41_227 (1-187) x US-09-799-451-250 (1-3981)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-799-451-250
                                                                                                                                                                                   Sequence 36, Application US/08286889
Sequence 36, Application US/08286889
Patent No. 5470953
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Mich
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5470953el Human 2 Integrin Alpha
NUMBER OF SEQUENCES: 51
CORRESPONDENCE ADDRESS:
ADDRESSE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/799,451
CURRENT FILING DATE: 2001-03-05
NUMBER OF SEC ID NOS: 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6783969el Nucleic Acids and
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 803
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATCHTIN Release #1.0, VG
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                        COUNTRY:
                                                                                                                                                       STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                             173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     153 AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIle
                                                                                                                                                                                                                                                                                                                                                                                                               63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 GACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATC
                                                                                                                          TRY: United States
60606-6402
                                                                                                                                                                           Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                               HisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zhang, Jie
Xue, Aidong J.
Zhao, Qing A.
Wang, Jian-Rui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Goodrich, ky-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wang, Dunrui
Yang, Yonghong
Wehrman, Tom
                                                                                                                                                                                                                                                                                                                                                                                                               CACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wehrman, Tom
Ghosh, Reena
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Yamazaki, Victo
Chen, Rui-hong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ren,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wang,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Feiyan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zhiwei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.27e-12
179.00
100.00%
100.00%
18.45%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
                                        Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0000
                                                                                                                                                                                                                                                               Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_41_227 (1-187) x US-08-286-889-36 (1-3528)
                        S
                                                         밁
                                                                                       ঠ
                                                                                                                            밁
                                                                                                                                                       á
                                                                                                                                                                                              밁
                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION:
US-08-286-889-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,4
FILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 938,659
REGISTRATION NUMBER: 938,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 3528 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE
                                                                                                                                                                                                                                                                                                                                   649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  544 ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       424 GACATTGCTTTCCTGATTGATTGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
        168 LeuGlnGlyIleIleHisSerIleLeuLysLys 178
                                                                                            152
                                                                                                                             820
                                                                                                                                                           135 ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                769
                                                                                                                                                                                                                                 117
                                                                                                                                                                                                                                                                  709
                                                                                                                                                                                                                                                                                                                                                                                                   604 GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 543
                                                                                                                                                                                                                                                                                                 98
                                                                                                                                                                                                                                                                                                                                                                    78
                                                                                                                                                                                                                                                                                                                                                                                                                                   58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 42
                                                                                                                                                                                                                             LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle 134
                                                                                                                                                                                                                                                                                            GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 116
                                                                                                                                                                                                                                                                                                                                                               ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 97
                                                                                                                                                                                                                                                                                                                                                                                                                                 AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu------
                                                                                                                            CGTTATGCTATTGGGGGGGGGAGATGCCCTTCCAGGAGCCCACTGCCCCTGAAGGAGCTGAAC 879
                                                                                                                                                                                                                                                                TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC 768
                                                                                                                                                                                                CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----GGCATCATT
                                                                                                                                                                                                                                                                                                                                 ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 708
                                                             ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1..3456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                       ----AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7.93e-08
141.50
47.64%
27.75%
14.59%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27866/32168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3528
53
75
25
```

------GGCCTG 648

57

936

97

768

603

77

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-485-618-36
; Sequence 36, Appl
; Patent No. 572853
밁
                     გ
                                                 밁
                                                                                               US-09-970-076-2_COPY_41_227 (1-187) x US-08-485-618-36 (1-3528)
                                                                                                                                                                                            Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                ; NAME/KEY:
; LOCATION:
US-08-485-618-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Gallatin, W.
APPLICANT: Van der Viere
TITLE OF INVENTION: NO.
                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Williams Jr., Joseph A.
REGISTATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32797
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 08/362,652 FILING DATE: 21-DEC-1994 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADUNCTIVY: Chicago
                                                                                                                                                                                                                                                                                                          TYPE: nucleic
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: Illinois
COUNTRY: United States
                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 0 FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          937
484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 543
                                                 424
                        23
                                                                                                                                                                                                                                                                                              TH: 3528 base pairs nucleic acid debness: single LOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60606-6402
                                                 GACATTGCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                                                        AspLeuTyrPheIleLeuAspLysSerClySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA 969
                     TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/08485618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      233 South Wacker Drive,
                                                                                                                                                                                                                                                                                                                                                                                        312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Van der Vieren,
                                                                                                                                                                                                                                                           CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                      312-474-6300
                                                                                                                                                                                                                                                                                     CDNA
                                                                                                                              7.93e-08
141.50
47.64%
27.75%
14.59%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W. Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    O'Toole,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        en, Monica
5728533el
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerstein, Murray & Borun
                                                                                                                                         Conservative: Mismatches: Indels:
                                                                                                                                                                                Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 Integrin Alpha Subunit
                                                                                                                              3528
53
38
75
25
                          42
                                                    483
                                                                            22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-362-652-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 36 Patent No.
  INFORMATION
                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                              ADDRESSES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            36, A-
40. 5766850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           58
                                                                                                                                                                                                                                                                                                                                                       Chicago
```

```
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5766850el
                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
APPLICATION SAUG-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 9: CORRESPONDENCE ADDRESS:
                                                                                                 TELECOMMUNICATION INFORMATION:
                       TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: Illinois COUNTRY: United States
                                                                                                                                                 NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                                                                                                                                 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    544 ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  604 GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      43 IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuGlnGlyIleIleHisSerIleLeuLysLys 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ĊTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ------AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG
FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/08362652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                         312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           No. 5766850el Human
93
                                                                                                                                                                                                                                                          US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08/362,652
  36:
                                                                                                                                                                                                                                                                                                                                  08/173,497
                                                                                                                                 27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----GGCCTG 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTGCAGCA
```

936

```
Sequence 36, Application US/08605672
Patent No. 5817515
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5817515el Hu
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; NAME/KEY:
; LOCATION:
US-08-362-652-36
                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_41_227 (1-187) x US-08-362-652-36 (1-3528)
                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                            믕
                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                   RESULT 9
US-08-605-672-36
                                                                                                                                                                            밁
                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 3528 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS: single
            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTTGCGAGCACCAGCACCTTGTTCTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                      649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         604
                                                                                                                                                                              937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23
                                                                                                                                                                                                                                                                                                                                                                                                                          98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 AspLeuTyrPhelleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                    LeuGlnGlyIleIleHisSerIleLeuLysLys 178
                                                                                                                                                                                                                                 ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                         ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                           CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT------GCATCATT
                                                                                                                                                                                                                                                                                                                                                                   LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                               TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                         GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-------
                                                                                                                                                                              ĊTTCGCAGCĂTCCAGAGGCAACTTCAGGAGĂĂĂ
                                                                                                                                                                                                                                                                                      CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 708
233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sdo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1..3456
Marshall, O'Toole, Gerstein, Murray & 33 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7.93e-08
141.50
47.64%
27.75%
14.59%
                                                                                                                                                                                                                                                   -AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
||| ::: |||||||||| |||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative:
                                                       Human
                                                       N
                                                                                                                                                                               969
                                                     Integrin
                                                        Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ------GCCCTG
                                                        Subunit
                                                                                                                                                                                                                                                                167
                                                                                                                                                                                                                                                                                                                                                                          134
                                                                                                                                                                                                                                                                                                                                                                                                   768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            483
                                                                                                                                                                                                                                      936
                                                                                                                                                                                                                                                                                           879
                                                                                                                                                                                                                                                                                                                                                819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57
                                                                                                                                                                                                                                                                                                                      151
                                                                                                          Ś
                                                                                                                                                                  5
                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                           Ş
  S
                                                       á
                                                                                   멹
                                                                                                                                         밁
                                                                                                                                                                                               밁
                             밁
```

58

AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 77

ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG

57 603

GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-----

------GCCTG

648 97

649

98

GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 116

544

3

IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-----

484

23 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 42

483

AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCCTG 543

```
US-09-970-076-2_COPY_41_227 (1-187) x US-08-605-672-36 (1-3528)
                                                                                                Query Match:
DB:
                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                 US-08-605-672-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/605,67
                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Chicago
STATE: Illinois
COUNTRY: United !
ZIP: 60606-6402
                                                                                                                                                                                No.:
                                                                                                                                                                                                                                                NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Williams Jr., Joseph REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                 CENGTH:
 424
                             4 AspLeuTyrPhelleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
|||::: |||::::::||| ||||||||||:::
GACATTGCTTTCCTGATTGATTGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                   312-474-0448
                                                                                                                                                                                                                                                                                                                                                                3528 base pairs
                                                                                                                                                                                                                                                1..3456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-DEC-1994
                                                                                                                                                                                                                                                                                                  CDNA
                                                                                                                                                                                                                                                                                                                                 single
                                                                                                                 7.93e-08
141.50
47.64%
27.75%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ≻
                                                                                                                                                  Length:
Matches:
Conservative:
                                                                                                                   Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Version
                                                                                                   3528
53
38
75
25
```

밁 Ś 8 5

र् 밁

밁 á 밁

```
RESULT 10
US-08-482-293A-36
                  / LOCATION:
US-08-482-293A-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No. 5831029
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 36, Application US/08482293A Patent No. 5831029
                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION UMBER: US 08/286,889
FILLING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGERENCE/DOCKET NUMBER: 27866/3268.
                                                                                                                                                                      INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 3528 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CUMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: PACENTIN Release #1.0, V
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/482,293A
PILING DATE:
                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 530 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5831029el Human
                                                                                                                                                                                                                  TELEFAX: 25-3856
                                                                                                                 STRANDEDNESS:
TOPOLOGY: lin
                                                       NAME/KEY:
                                                                                                                                                    TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValTyrCygValGlyValLygAsp---PheAsnGlu---ThrGlnLeuAlaArgIle--- 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuGlnGlyIleIleHisSerIleLeuLysLys 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT------GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Illinois
                                                                                                                                                                         3528 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                       312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              United States
                                                       CDS
                                                                                                                                 single
                                                                                                                                                                                                                                                                                                                 27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      768
                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 11
US-08-943-363-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_41_227 (1-187) x US-08-482-293A-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score:
                                                                                                                                                                                                                                                                                                                                                                          Sequence 36, Application Patent No. 5837478
                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                    NERAL INFORMATION: M. MICHAEL APPLICANT: Gallatin, W. MICHAEL APPLICANT: Van der Vieren, Monica APPLICANT: Van der Vieren, Monica APPLICANT: Van der Vieren, Monica APPLICANT: No. 5837478el
                                                                                                                   ZIP: 60606-6402
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                             STREET: L. STREET: Chicago
APPLICATION NUMBER:
                                                                                                                                                        COUNTRY: United States
                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 649 ÁCCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             604 GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA------GGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         544 ATGCAATACTCGAACATCCTGAAGACCCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                168 LeuGlnGlyileIleHisSerIleLeuLysLys 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGÄGCACCAGCACCTTGTTCCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    424 GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT------GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuPhePheTyrSerGlu-----ArgGluAjaAsnArgSerArgAspLeuGjyAlaije 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ĊTTCGCAGCĂTCCAGAGGCAACTTCAGGAGĂAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ------AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 167
                                                                                                                                                                               Illinois
                                                                                                                                                                                                                    233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                        Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7.93e-08
141.50
47.64%
27.75%
14.59%
                                                                                                                                                                                                                                                                                                                                                                                               US/08943363
    US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative:
                                                                                                                                                                                                                                                                                                    Human
                                                                                                                                                                                                                                                                                                  2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               969
                                           #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3528
53
38
75
25
```

768

936

879 151 819 708

97 648 603 57 543

FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: (

US 08/173,497

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                              밁
                                                                                          S
                                                                                                                               밁
                                                                                                                                                        á
                                                                                                                                                                                             밁
                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                         멍
                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_41_227 (1-187) x US-08-943-363-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-943-363-36
                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 3528 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 23-DEC-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/286,889

FILING DATE: 5-AUG-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           424
                                                                                                                                                                                                                                                                                                                           544
                                                                                                                                                                                               649
                                                                                                                                                                                                                                                             604
                                                                                                                                                                                                                                                                                                                                                                                         484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG
                                                                                                                                                                                                                                                                                           58
                                                                                                                                                                                                                                                                                                                                                           43
                                                                                                                                                                                                                                                                                                                                                                                                                           23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acid
                                                                                                                                                                                                                                                                                                                                                        IlevalPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-----
                                                                                                                                                                                                                                                                                                                                                                                                                        TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                     ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                             TCCCGTAAAAGTĠĊĊAAGAAGATCCTCCTTGTCATCAĊAĠATĠĠĠCAGAAATACAGAĠĀĊ
                                                                                                                                                        GlyTyrArgThrAla---SerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp 116
                                                                                                                                                                                                                          ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                          AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp
CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCCACTGACCCTGAAGGAGCTGAAC
                                                              CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----
                                                                                          LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle 134
                                                                                                                                                                                             ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 708
                                                                                                                                                                                                                                                           GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA------GGCCTG
                                                                                                                                                                                                                                                                                                                             ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7.93e-08
141.50
47.64%
27.75%
14.59%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35
38
38
25
25
                                                                    -GGCATCATT
                                                                                                                                    768
                                                                                                                                                                                                                                  97
                                                                                                                                                                                                                                                                  648
                                                                                                                                                                                                                                                                                                77
                                                                                                                                                                                                                                                                                                                               603
                                                                                                                                                                                                                                                                                                                                                                                                543
                                                                                                                                                                                                                                                                                                                                                                                                                              42
                                                                                                                                                                                                                                                                                                                                                                                                                                                              483
                                    151
                                                                    819
                                                                                                                                                                                                                                                                                                                                                                57
```

```
CURRENT APPLICATION NUMBER: US/09/193,043
CURRENT FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-12-21
EARLIER FILING DATE: 1994-12-21
EARLIER FILING DATE: 1994-10-03
EARLIER FILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
US-09-193-043-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
밁
                          S
                                                                  밁
                                                                                             ð
                                                                                                                                      밁
                                                                                                                                                                   8
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2_COPY_41_227 (1-187) x US-09-193-043-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ) OTHER INFORMATION: Description of Artificial Sequence: primer US-09-193-043-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Pate
SEQ ID NO 36
LENGTH: 3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 36, App...
Sequence 36, App...
No. 6251395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 6251395el Human
FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY: CDS
LOCATION: (1)..(3453)
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           152
                                                                                                                                                                                                           544 ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        168
                                                                                                                                        604
                                                                                                                                                                                                                                                                             484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG 543
                                                                                                                                                                                                                                                                                                                                                58
                                                                                                                                                                                                                                             43
                                                                                                                                                                                                                                                                                                             23 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 42
                                                                                                                                                                                                                                                                                                                                                                              4 AspLeuTyrPhelleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PatentIn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuGlnGlyIleIleHisSerIleLeuLysLys 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---
                                                                                                  ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 97
                                                                                                                                                               AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 77
                                                                                                                                                                                                                                         IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu---------
TCCCGTAAAAGTĠĊĊAAGAAGATCCTCCTTGTCATCAĊĀĠĀTĠĠĠCAGAAATACAGAĠĀC
                                GlyTyrArgThrAla---SerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp 116
                                                                                                                                        GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-----
                                                                  ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7.93e-08
141.50
47.64%
27.75%
14.59%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/09193043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          969
                                                                                                                                                                                                                                                                                                                                                                                                                                                          3528
53
38
75
25
                                                                                                                                             GGCCTG 648
                                                                                                                                                                                                                                                    57
                                                                                                                                                                                                                                                                                                                                                                                         22
```

```
Alignment Scores: Pred. No.: Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
US-09-688-307A-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                       ) OTHER INFORMATION: US-09-688-307A-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1
NUMBER OF SEQ ID NOS
SOFTWARE: Patentin V
SEQ ID NO 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 6432404el Human Beta-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 36, Application US/09688307A Patent No. 6432404
                                                                                                       NAME/KEY: misc_feature
LOCATION: 506
OTHER INFORMATION: Xaa = a:
NAME/KEY: misc_feature
LOCATION: 1117
OTHER INFORMATION: Xaa = a:
NAME/KEY: misc_feature
LOCATION: 1118
LOCATION: 1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: 27866/36646
CURRENT APPLICATION NUMBER: US/09/688,307A
CURRENT FILING DATE: 2000-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1994-12-21 PRIOR APPLICATION NUMBER: 08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEY: CDS
LOCATION: (1).. (3453)
OTHER INFORMATION: Description of Artificial Sequence: primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 3528
TYPE: DNA
ORGANISM: Rattus
                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature
LOCATION: 464
OTHER INFORMATION: Xaa =
                                                                                                                                                                                                                                                              NAME/KEY: misc_feature LOCATION: 486
OTHER INFORMATION: Xaa
                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Xaa =
                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature
LOCATION: 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 08/286,889 FILING DATE: 1994-08-05 APPLICATION NUMBER: 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 08/173,497 FILING DATE: 1993-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 08/605,672 FILING DATE: 1996-02-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 09/193,043 FILING DATE: 1998-11-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuGlnGlyIleIleHisSerIleLeuLysLys 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGTTATGCTATTGGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rattue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1997-10-03
                                                                                             Xaa =
 7.93e-08
141.50
                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N
.
                                                                                           any
                                                                                                                                                any
                                                                                                                                                                                                          any
                                                                                                                                                                                                                                                                  any
                                                                                                                                                                                                                                                                                                                         any
                                                                                                                                                                                                                                                                                                                                                                                 any
                                                                                             ဝူ
                                                                                                                                                  õ
                                                                                                                                                                                                          မ္
                                                                                                                                                                                                                                                                  ç
                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                   or unknown
                                                                                             unknown
                                                                                                                                                    unknown
                                                                                                                                                                                                            unknown
                                                                                                                                                                                                                                                                    unknown
                                                                                                                                                                                                                                                                                                                         unknown
 Length:
Matches:
                                                                                               amino
                                                                                                                                                                                                            amino
                                                                                                                                                                                                                                                                  amino acid
                                                                                                                                                                                                                                                                                                                           amino
                                                                                                                                                                                                                                                                                                                                                                                   amino
                                                                                                                                                    amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  969
                                                                                                                                                  acid
                                                                                                                                                                                                          acid
                                                                                                                                                                                                                                                                                                                           acid
 3528
53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-350-259-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2_COPY_41_227 (1-187)
                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/350,259
CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/193,043
EARLIER FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER FILING DATE: 1993-12-36,889
EARLIER FILING DATE: 1994-08-05
                 NUMBER OF SEQ ID NOS: 114
SOFTWARE: PatentIn Ver. 2
SEQ ID NO 36
LENGTH: 3528
                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 36, App
Patent No. 66209
                                                                                                                                                                                                                                                                                                                         APPLICANT: Gallatin, Michael W. APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: NO. 6620915el Human 2 FILE REFERENCE: 27866/35004
                                                                                             EARLIER APPLICATION NUMBER: 08/362,652
EARLIER FILING DATE: 1994-12-21
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         168 LeuGlnGlyIleIleHisSerIleLeuLysLys 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              135 ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                544 ATGCAATACTCGAACATCCTGAAGACCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    604 GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   424 GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAAGGGACTTTGCCCAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGTTATGCTATTGGGGTGGGAGATGCCTTCCAGGAGCCCACTGCCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlyTyrArgThrAla---SerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu--------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ĊTTCGCAGCĂTCCAGAGGCAACTTCAGGAGĂĂ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ------AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 167
                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/09350259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    47.64%
27.75%
14.59%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            x US-09-688-307A-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1255 Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCCTG
```

936

879 151 819 134 768

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2_COPY_41_227 (1-187) x US-09-350-259-36 (1-3528)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Description US-09-350-259-36
                                                                                                                                                                                                          RESULT 15
US-08-485-618-54
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
Pred. No.:
                                                                                                                                                                                        Sequence 54,
                                                                                                                                                                           Patent No. 57285
                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Rattus ratt FEATURE: NAME/KEY: CDS LOCATION: (1)..(3453)
                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                          APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OP INVENTION: No. 5728533el NUMBER OF SEQUENCES: 103
                              STREET:
CITY: C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               484 AAGGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               424
                                                                                                                                                                                                                                                                                                                                                                                         820
                                                                                                                                                                                                                                                                                                                                                                                                                       135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     709
                                                                                                                                                                                                                                                                                         168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4
             Chicago
: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                  ValTyrCysValGlyValLysAsp---PheAsnGlu---ThrGlnLeuAlaArgIle---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĠĂĊCCTCAGAGCCTGGTGGATCCCATTGTCCAGĆŤĠĊÀÁ-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGCAATACTCGAACATCCTGAAGACCCCATTTTACCTTCACTGAATTCAAGAACATCCTG
                                                                                                                                                                                                                                                           ĊTTCGCAGCATCCAGAGGCAACTTCAGGAGAAA
                                                                                                                                                                                                                                                                                                                           ACCATTGGCTCAGCTCCCCCACAGGACCACGTGTTCAAGGTAGGCAAC---TTTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuPhePheTyrSerGlu-----ArgGluAlaAsnArgSerArgAspLeuGlyAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŢḥrŢγrMetHisGluGlγPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IlevalPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-------
                                                                                                                                                                                                                                                                                         LeuGlnGlyIleIleHisSerIleLeuLysLys 178
                                                                                                                                                                                                                                                                                                                                                                                         CGTTATGCTATTGGGGGGGGGGAGATGCCTTCCAGGAGCCCACTGCCCCTGAAGGAGCTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCCTGGAGTATAGTGATGTCATTCCCGCCGCAGACAAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 708
                                                                                                                                                                                           Application US/08485618
United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7.93e-08
141.50
47.64%
27.75%
14.59%
                                                                                                                                                                                                                                                                                                                                               -AlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of Artificial Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                              Human
                                                                                                              N
                                                                                                                                                                                                                                                              969
                                                                                                              Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3528
53
38
75
25
                                                                                                              Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----GGCCTG 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                            -GGCATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    483
                                                                                                                                                                                                                                                                                                                                                                                            879
                                                                                                                                                                                                                                                                                                                                                                                                                            151
                                                                                                                                                                                                                                                                                                                                                                                                                                                          819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22
                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
DB:
                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                     밁
                                              S
                                                                                   밁
                                                                                                           Ś
                                                                                                                                                 밁
                                                                                                                                                                              á
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-485-618-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, V
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
ANAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 3597 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX:
                                                                                                                                                     673
                                                                                                                                                                                                                   613
                                                                                                                                                                                                                                                                                 553
                                                                                                                                                                                                                                                                                                                                                 493
                                                                                     718
                                                     86
                                                                                                                   78
                                                                                                                                                                                                                                                 43
                                                                                                                                                                                                                                                                                                                 23
                                                                                                                                                                                                                                                                                                                                                                               4.
                                                                                                                                                   GACCCTCAGAGCCTGGTGGATCCCATTGTCCAGCTGCAA------GGCCTG 717
                                                                                                                                                                                                                                              IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu----------
                                                                                                                                                                                                                                                                                                             TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 42
                                                                                                                                                                                                                                                                                                                                                  GACATTGCTTTCCTGATTGATGGTTCTGGCAGCATTAACCAAAGGGACTTTGCCCAGATG
                    TCCCGTAAAAGTGCCAAGAAGATCCTCCTTGTCATCACAGATGGGCAGAAATACAGAGAC
                                                  GlyTyrArgThrAla---SerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp 116
                                                                                                                ThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGln 97
                                                                                                                                                                              AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAsp 77
                                                                                                                                                                                                                 ATGCAATACTCGAACATCCTGAAGÁCCCATTTTACCTTCÁCTGAÁTTCAAGAACATCCTG 672
                                                                                                                                                                                                                                                                                 AACGACTTTGTCAAAGCTTTGATGGGAGAGTTTGCGAGCACCAGCACCTTGTTCTCCCCTG 612
                                                                                   ACCTACACAGCCACAGGCATCCGGACAGTGATGGAAGAGCTATTTCATAGCAAGAATGGG 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
40..3525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  8.16e-08
141.50
47.64%
27.75%
14.59%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          54:
```

```
US-09-970-076-2_COPY_41_227 (1-187) x US-08-485-618-54 (1-3597)
AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                          27866/32797
                                                                                        Length:
Matches:
Conservative:
                                                                  Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #1.25
                                                      3597
53
38
75
25
```

THIS PAGE BLANK (USPTO)

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
1414
1193.8
1193.8
1193.8
1193.8
1193.4
1193.4
1192.4
1192.4
1192.4
1052.4
1052.4
1052.6
906.8
905.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IDENTITY NUC Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-1
1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            December 18, 2005, 07:01:38 ; Search time 7579.89 Seconds (without alignments)
10603.927 Million cell updates/sec
   111

844000

844000

844000

844000

844000

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400

84400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5883141 segs, 28421725653 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenEmbl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GenCore version 5.1,6
Copyright (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gb_ba:
gb_env:
gb_env:
gb_pa:

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length DB
                                                                           1414
5540
5540
5540
5540
1576
1658
1496
1496
1496
1718
1436
                                       AX458366
AX393380
AX393301
AX393301
AX458370
AX258370
AX928975
AX928977
AX928977
AX928976
AX928976
AX928976
AX928976
AX928976
AX928976
AX928976
AX928976
AX988778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11766282
AX458366 Sequence
AX45839346 Sequence
AX393301 Sequence
AX393301 Sequence
AX458370 Sequence
AX7928975 Homo sapi
AY928974 Homo sapi
AY928974 Homo sapi
AY928976 Homo sapi
AY928976 Homo sapi
AY928976 Homo sapi
AX928172 Sequence
BC012074 Homo sapi
AX458372 Sequence
BC0498433 Sequence
BD156323 Primer fe
AX458374 Sequence
BD156323 Primer fe
AX458374 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
```

45	44	43	42	41	40	39	38	37	36	35	34	υ U	32	<u>3</u> 2	30	29	28	27	26	25	24	23	22	21	20	۲
			344.2		344.6	344.6	344.6	345.8	345.8	345.8	346	346.2	346.2	348	349	368	368	516.8	•	573.4	•	853.4	•	853.4	853.4	
•	4	4		•	24.4	4.	٠.	4	4.	4.	Α.	٠.	4	4.	4.	٠.	•	٠,		٥.	7.			.0		
1461	3677	3677	3677	3676	1470	1467	1464	4350	4348	3677	346	2234	2234	355	356	464	464	3981	4007	736	4739	5225	5220	5220	5220	
σ	σ	σ	σ	œ	œ	σ	σ	σ	σ	6	σ	8						σ	œ	φ	ø	9	9	0	o	
BD272532	BD272510	BD272509	BD272508	AB209913	AY233452	BD272541	BD272493	BD272540	CQ414929	BD272492	CQ433315	AK091721	AX747144	CQ415556	CQ426476	AX868118	BD148180	AR578074	AK025429	AY754025	BC057043	BC094544	AF378762	AX393370	AX393256	
BD272532	BD272510	ED272509	80272508	AB209913	AY233452	BD272541	BD272493	BD272540	CQ414929	BD272492	CQ433315	AK091721	AX747144			æ		AR578074	AK025429	AY754025	BC057043	BC094544			AX393256	
Secrete	Secrete	Secreted	Secreted	Homo sapı		Secreted	Secreted	Secreted	Sequence	Secreted	Sequence	Ното варт	Sequence	Sequence	Sequen	Sequence	Primer	Sequence	Ното вар	Rattus	Mus muscu	Mus muscu		Sequenc	Sequence	

## ALIGNMENTS

Query Match Best Local Si Matches 1414;	ORIGIN	CDS	source	FEATURES	JOURNAL	AUTHORS	SOURCE ORGANISM	RESULT 1 AX458366 LOCUS DEFINITION ACCESSION VERSION
Query Match 100.0%; Score 1414; DB 6; Length 1414; Best Local Similarity 100.0%; Pred. No. 0; Matches 1414; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	/codon start=1 /codon start=1 /protein id="CAD38349.1" /protein id="CAD38349.1" /db_xref="di-21725039" /db_xref="di-21725039" /translation="MATAERRALGIGFOWLSLATLVLICAGOGGRREDGGPACYGGFD /translation="MATAERRALGIGFOWLSLATKFIS SPOLRMSFIVPSTICHAGLIFEDREOI LYFILDKSGSVLHHWNBIYYFVGQLAHKFIS SPOLRMSFIVPSTAVILATDOEHLHEDLFFY RQGLEELQKVLPGGOTYMHGGFERAASGIYYERRGGYRTAFVIALTDOEHLHEDLFFY SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFOALQGIIHSILKK SERELARAFBSTICAGESFOVVVRGNOGFRARRVDRVLCSFKINDSVTLMEKFFSVED TYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGSILAIALLLIFLLL ALALLWWFWPLCCTVIIKEVPPPPAEESEENKIK"	/organisms named bNA"  /mol type="unassigned bNA"  /db_xref="taxon:9606"  104. 1210  /note="unnamed protein product"				Young, J.A., Bradley, K.A., Collier, R.J. and Mogridge, J.S. Recentor for b. Anthracis toxin	Homo sapiens (human) M Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo.	AX458366 1414 bp DNA linear PAT 08-JUL-2002 NN Sequence 1 from Patent WO0246228. AX458366 AX458366.1 GI:21725038
••	1.07440							

Ś

1 AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG 60

밁 Ś 밁 á

```
781
                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                  901
                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                           TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                CACCCGAGGAACAACCTTAATGAAACTGACAGAGAAGACAGAGAAAAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
CCTGCTGATCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                 CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                            AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCACCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                   TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                 TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGGAAACGGCTT
                                                                                                                                                                                                                                                                 GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                           GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                   TGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGGCAAGGGGACGCAGGAAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANAGAAGTTGGCATGANAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                          1140
                                                            1080
                                                                                   1020
                                                                                                        1020
                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                      1080
                                                                                                                               960
                                                                                                                                                    960
                                                                                                                                                                         900
                                                                                                                                                                                               900
                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
```

á 밁 ક 밁 Ś 8 Ś 밁 á 밁 δ 밁 Ş

δ 밁 á 밁 á 밁 á В δ 밁 Ş B

á 용 δ 뮻 á 밁

0

Mismatches

0

Indels

0

Gaps

```
REFERENCE
AUTHORS
TITLE
JOURNAL
PUBMED
REMARK
REFERICE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 2
AF421380
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                       3'I
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              片
                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                             Query Match
Best Local Similarity
Matches 1414; Conserv
                                                                                                                                                                                                                                                                                               5'UTR
                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                     H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa; C
Mammalia; Eutheria; E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AF421380
Homo sapiens a
AF421380
AF421380.1 G
                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission
Submitted (19-SEP-2001) Department
Wisconsin-Madison, 1400 University
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                          http://www.nature.com
2 (bases 1 to 1414)
Bradley,K.A., Mogridge,J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 1414)
Bradley, K.A., Mogridge, J., Mourez, M., Collier, R.J. and You Identification of the cellular receptor for anthrax toxin Nature 414 (6860), 225-229 (2001)
11700562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTGCTGATCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  алталалаталсалаgалаgалаgалаgалагасасасасасасасасасасасасталсствасасасс
100.0%;
Larity 100.0%;
Conservative
                                                                                                 /codon_start=1
/product="anthrax toxin receptor"
/product="anthrax toxin receptor"
/protain_id="anl26496.1"
/protain_id="anl26496.1"
/db xref="cl:16566413"
/db xref="cl:16566413"
/translation="MATAERRALGIGFOWLSLATLVLICAGOGGRREDGGPACYGGFD
/translation="MATAERRALGIGFOWLSLATLVLICAGOGGRREDGGPACYGGFD
/translation="MATAERRALGIGFOWLSLATLVLICAGOGRREDGEOTY
RQGLEELQKYLPGGOTYMHEGFORRALSEQIYYENROGYRTASVITALTDGELHEDLFFY
RQGLEELQKYLPGGOTYMHEGFORRALGIYYENROGYRTASVITALTDGELHEDLFFY
SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKK
SCIETIAAEFSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKFFSVED
TYLLCFAFILKEVGMKAALQVSMNDGLSFGISSSVIITTTHCSDGSILAIALLILFELLL
ALALLMWFWPLCCTVIIKEVPFPPAEESSENKIK"
1211...1414
                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="mRNA"
/db xref="taxon:9606"
/cell_line="HeLa"
                                                                                                                                                                                                                                                                                   /note="ATR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rccctgtattcaaatcccagtgtctaacattcaataaatagctatatgaaat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GI:16566412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1414 bp mRNA anthrax toxin receptor mRNA,
                                                           .0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini;
                                             Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mourez, M.,
                                             1414;
No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                    of Oncology, University of Ave., Madison, WI 53706, U
                                                             멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Collier, R.J.
                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear PRI 13-NOV-2001 complete cds.
                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Young, J.
                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1260
```

δ

밁 5

밁

1260 1260 1200 1140

1200

```
1021
                                     1021
                                                           961
                                                                               961
                                                                                                    106
                                                                                                                         106
                                                                                                                                              841
                                                                                                                                                                 841
                                                                                                                                                                                       781
                                                                                                                                                                                                             781
                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                         109
                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                    CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                 AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                             CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                       CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                   TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGGAAACGGCTT
                                                                                                                                                                                                                                                                                      ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                               CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCCACTGGAATGAAATCTATTACTTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTACGGCGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                       TGAACCATCCACCATATGTGCAGGAGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                           ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                      TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                 CGGGCAAGGGGACGCAGGGAAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCGTGGGAAGGAGCGGACCCTGCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                              1020
                                                                                   1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                        960
                                                                                                                                                  900
                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
  1140
                      1080
                                         1080
                                                                                                                            960
                                                                                                                                                                       900
                                                                                                                                                                                            840
                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 3
AX393246
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ર્શ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                     밁
                                   Ş
                                                            밁
                                                                                á
                                                                                                        밁
                                                                                                                       S
                                                                                                                                                                    Ś
                                                                                                                                                                                            밁
                                                                                                                                                                                                         5
 Ś
                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                    Query Match
Best Local Sim
Matches 1195;
                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1141
                                       241
                                                              221
  301
                       281
                                                                                    181
                                                                                                         161
                                                                                                                                                  101
                                                                                                                             121
                                                                                                                                                                       61
                                                                                                                                                                                            41
                                                                                                                                                                                                                μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 176 from AX393246 GI:197
                                                                                                                                                                                                                                                                                                                                 St Croix,B., Kinzler,K.W. and Vogelstein, Endothelial cell expression patterns Patent: WO 0210217-A 176 07-FEB-2002; The Johns Hopkins University (US)
                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                  Hominidae; Homo.
                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCGTGCAACGTATTTATACAATGCTCTGAAAATCATAGTCTCAATCTAGACAGTCTTTT 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCTGCCGAGGAGAGTGAGGAAAATAA
                                                                                                        GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCGCAGTGCTCGGCATCCGGCATCTGGCCACTCTGGTGCTCATCTGCGCGCAGTGCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAAAAAAAAAAAAAAAAAAAAAAAAAA 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGCTGATCCTGCTCCTGCTCCTAGCCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                      CGGGCAAGGGGACGCAGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                            AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCTGCCGAGGAGAGTGAGGAAAATAA
 GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                   AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                              AGCGTGGGAAGGAAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                    84.4%;
ilarity 99.8%;
Conservative
                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="unassigned DN
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                          . 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GI:19701296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent
                                                                                                                                                                                                                                                                                                                                                                                                           Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                     Score 1193.8; DB 6
Pred. No. 1.7e-288;
D; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5540 bp
: WO0210217
                                                                                                                                                                                                                                                                                                     DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1414
                                                                                                                                                                                                                                                           6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT
                                                                                                                                                                                                                                      0;
```

Gaps

0

100

60

120

160

300 340

280 240 180

220

23-MAR-2002

Ş 밁 á В

Ş 밁 S 8 δ 밁 Ş

5 8 5

밁 5 밁 5 8

밁 á

ą

음 성 음

হ 밁 S 문 δ 밁 5 В

```
RESULT 4
AX393301
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                   SOURCE
ORGANISM
                                                                                                                                                                                        δ
                                                                                                                                        유
                                                                                                                                                                           밁
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                    음 성 음
                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                 성 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઇ
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                        1181
                                                                                                                                                                           1121
                                                                                                                                                                                              1081
                                                                                                                                                                                                                1061
                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                     1001
                                                                                                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                                        941
                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                           881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      521
                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                821
                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                    761
                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                         701
                                                                                                                                                                                                                                                                                                                                                                                                                                                         199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                             AX393301
Sequence 23:
AX393301
AX393301.1
       Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
                                                                                                                                       CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                                                                                                                                                                                                       ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACCCGAGGAACAACCTTAATGAAACTGACAGAGAAGACAGAGAAAAATCCGTCAAGGCCT
                                                                                                                                                                                      CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                               AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                           TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                               GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTTGGTGTAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                           CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                             CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGGTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                       CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                 TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                     GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens (human)
                                                                                  231
                                                               GI:19701322
                                                                                 from
                                                                                  Patent
                                                                                  5540 bp
: WO0210217
                                                                                          DNA
                                                                                           linear
                                                                                           PAT
                                                                                           23-MAR-2002
                                                                                                                                                                                                                                                                                         1000
                                                                                                                                                                                               1140
                                                                                                                                                                                                                 1120
                                                                                                                                                                                                                                    1080
                                                                                                                                                                                                                                                      1060
                                                                                                                                                                                                                                                                      1020
                                                                                                                                                                                                                                                                                                           960
                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                  880
                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                      820
                                                                                                                                                                                                                                                                                                                                                                                                                                          760
                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                             940
                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                              Ş
                                                                                                                                                       δ
                                                                                                                                                                                                             밁
                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
        5 B 5
                                                          밁
                                                                                                  밁
                                                                                                                 ঠ
                                                                                                                                   g
                                                                                                                                                                           밁
                                                                                                                                                                                          5
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Sim
Matches 1195;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bource
          841
                           821
                                                                761
                                                                              721
                                                                                                     701
                                                                                                                     661
                                                                                                                                         641
                                                                                                                                                           601
                                                                                                                                                                           581
                                                                                                                                                                                              541
                                                                                                                                                                                                                 521
                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                      461
                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                         401
                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                            341
                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                  281
                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                      221
                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             St Croix,B., Kinzler,K.W. and Vogelstein,B. Endothelial cell expression patterns Patent: WO 0210217-A 231 07-FEB-2002; The Johns Hopkins University (US)
Location/Qualifiers
1. .5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                    ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                            CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCCTGAGGGTCGTGGCGAGTTCGCGG
CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                      TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                        TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                   GGAACAGTIGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                            CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                            GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                  GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                  CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                       CGGGCAAGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGTGGGAAGGAGCGGACCCTGCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                            TGAACCATCCACCATATGTGCAGGAGAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned DN/
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1193.8; DB 6
Pred. No. 1.7e-288;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                840
                                                                  820
                                                                                    780
                                                                                                      760
                                                                                                                        720
                                                                                                                                                             660
                                                                                                                                                                               640
                                                                                                                                                                                                 600
                                                                                                                                                                                                                   580
                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                        520
                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                           460
                                                                                                                                                                                                                                                                                                                               400
                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                    340
                                                                                                                                                                                                                                                                                                                                                                                                        280
                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                           220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
            900
                              880
                                                                                                                                           700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
```

Query Best I Matche Qy Db Db		FEATURES BOU CDS	REFERENCE AUTHORS TITLE JOURNAL	RESULT 5 AX458370 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM	D	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Query Match Query Match Best Local Similarity 99.8%; Pred. No. 1.7e-288; Best Local Similarity 99.8%; Pred. No. 1.7e-288;  Matches 1195; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  1 AGGACCCCGCAGGAAGGACCCCGCGATGGCCGCTCCCTGAGGGTCGTGGCGAGTTCGCGG 60	/codon start=1 /proteIn id="CAD38350.1" /proteIn id="CAD38350.1" /db xref="gi: 21725041" /db xref="gi: 21725041" /db xref="gi: 21725041" /db xref="gi: 21725041" /translation="MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD /translation="MATAERRALGIGFQWLSLATLYLICAGQGGRREDGGPACYGGFD /translation="MATAERRALGIGFQWLSLATLYLICAGGTHASEQIYYENRQGYRTASVIIALTDGELHEDLFFY SEREAMRSEDLGALTYCYCVYCDFWETQCLARIADSKCHVFFYWDGFQALGIHSILKK SCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVED TYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGSILAIALLILFILL ALALLWWFWPLCCTVIIKEVFPPPAEESSEEDDDGLFKKKWPTVDASYYGGRGVGGIK RMEVYMGEKGSTEEGAKLEKAKNARVKMPEGEYEFPEPRNILMNMRRPSSPRRWYSPI KGKLDALWVLLRKGYDRVSVMRPQPGDTGRCINFTRVKNNQPAKYPLNNAYHTSSPPP APIVTPPPPAPHCPPPPPSAPTPPIPSPFTLPPPPQAPPPNNAPPPSRPPPRVV"	rce /organism="Homo sapiens" /mol_type="unassigned DNA" /db_xref="taxon:9606" 144. 1838 /note="unnamed protein produ	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo.  E 1 Young,J.A., Bradley,K.A., Collier,R.J. and Mogridge,J.S. Receptor for b. Anthracis toxin Receptor for b. Anthracis toxin Patent: WO 0246228-A 5 13-JUN-2002; WISCONGIN ALIMNIT RESEARCH FOUNDATION (US)	AX458370 5540 bp DNA Sequence 5 from Patent WO0246228. AX458370 AX458370.1 GI:21725040 Homo sapiens (human)	1081 CCTGCTGATCCTGTTCCTGCTCCTAGCCCCTGGCTCTCTGGTGGTTCTGGCCCCTCTG 1140	
p	8 8 8 8 8 8 8	Q & Q \	DD Q2 DD Q2	0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0	& p & p	&
1021 CTCCAGTTCTGTCATCACCACCACACACTGTTCTGACGGTTCCATCCCTGGCCATCGC 1080	821 TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGAAACGGCTT 880 841 CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGGTTCAAGATCAATGACTCGGTCAC 900	GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC 7	601 TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTCAATGAGAC 660	461 AGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATG		121 GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTTGATCTGGCC 180

160 120 100

280

240 220

300

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
AF279145
                   გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
PUBMED
                                                      Query Match
Best Local Similarity
Matches 1195; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene
                                                                                                                                                                                                                                            mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sg
                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                   peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens tumor endothelial m complete cds.
AF279145
AF279145.2 GI:14017380
                     μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (09-MAY-2001) Johns Hopkins Oncology Center, Johnshis University, 1650 Orleans Street, Baltimore, MD 21 Sequence update by submitter On May 9, 2001 this sequence version replaced gi:9857405.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  St. Croix, B., Vogelstein, B. and Kinzler, K.W.
Direct Submission
Submitted (16-JUN-2000) Johns Hopkins Oncology Center,
Hopkins University, 1650 Orleans Street, Baltimore, MD
3 (bases 1 to 5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hominidae; Homo.

1 (bases 1 to 5540)

St. Croix, B., Rago,C., Velculescu,V., Traverso,G., Romans,K.E.,
Montgomery,E., Lal,A., Riggins,G.J., Lengauer,C., Vogelstein,B.
Kinzler,K.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   St. Croix,B., Vogelstein,B. and Kinzler,K.W. Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genes expressed in human tumor endothelium Science 289 (5482), 1197-1202 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10947988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 5540)
                                                                                                                                                                                                                                                                                                   /gene="TEM8"
/codon_start=1
/codon_start=1
/product="tumor endothelial marker 8 precursor"
/product="tumor endothelial marker 8 precursor"
/protein_id="AAK52094.1"
/protein_id="AAK52094.1"
/protein_id="AAK52094.1"
/brotein_id="AAK52094.1"
/translation="MATAERRALGIGFOWLSLATLVLICAGOGGRREDGGBACYGGFD
/translation="MATAERRALGIGFOWLSLATLVLICAGOGGRREDGGBCYGGFD
/translation="MATAERRALGIGFOWLSLANGYTYSTRAGTILMKLIEDREGI
ROGLEELOKVLPGGDTYMHEGFERAASEQIYYENROGSYRTASVIIALTLEFEY
SEREANRSDLGAIVYCVGSVGDREGIQLARIADSKOHVFEVNDGFOALOGIIHSILKK
SCIEILAAEPSTICAGESFOVVVRGUGFSHARNVDRVLCSFKINDSVTLAGEFFSVB
SCIEILAAEPSTICAGESFOVVVRGUGFSHARNVDRVLCSFKINDSVTLAGEFFSVB
SCIEILAAEPSTICAGESFOVVVRGUGFSHARNVDRVLCSFKINDSVTLAGEFFSVB
SCIEILAAEPSTICAGESFOVVRGUGFSHARNVDRVLCSFKINDSVTLAGEFFSVB
SCIEILAAEPSTICAGESFOVVRGUGFSHARNVDRVLCSFKINDSVTLAGEFFSVB
SCIEILAAEPSTICAGESFOVVRGUGFSHARNVDRVLCSFKINDSVTLAGEFFSVB
SCIEILAAEPSTICAGESFOVVRGUGFSHARNVDRVLCSFKINDSVTLAGEFFSVB
SCIEILAAEPSTICAGESFOVVRGUGFSTENDSOLOGLEKKAKTYFUNDASYYGGGGVGGIK
RMEVRHGEKGSTEGAKLEKAKAARVKHPEQESEEPEPBRULNNUMREPSSBREKWYSBI
KGKLDALMVLLRKGYDRVSVMRPODGDTGRCINFTRVKNNQPAKYPLNNAYHTSSPPP
AGYTTPPPPBAPHCPPPPPSAPTPPIPSPSTLPPPPQAPPPNRAPPPSRPPPRSV"
AAYTTPPPPAPAPHCPPPPPSAPTPPIPSPPPSTLPPPPQAPPPNRAPPPSRPPPRSV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo Bapiens"
mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="4"
1. .5540
                                                                                                                                                 /gene="TEM8"
/product="tumor e
/product="tumor e
1104. .1172
/gene="TEM8"
/note="Region: pr
                                                                                                                                                                                                                                                /gene="TEM8"
225. ,1835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="TEM8"
|44. .1838
                                                                           84.4%;
99.8%;
                                                          0
                                                          Score 1193.8; DB 8; Pred. No. 1.7e-288; 0; Mismatches 2;
                                                                                                                                                     predicted
                                                                                                                                                                                                               endothelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     p mRNA linear PRI 09-MAY-2001
marker 8 precursor (TEM8) mRNA,
                                                                                                                                                         transmembrane
                                                                                                                                                                                                                 marker
                                                                                             Length
                                                                                                                                                         domain"
                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                              0
                                  8
                                                                                 밁
                                                                                                        Ś
                                                                                                                                               밁
                                                                                                                                                                                          8
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
         밁
                                              1081
         1121
                                                                                                                                                           1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                  961
                                                                                                                                                                                                                                    941
                                                                                                                                                                                                                                                                                                              881
                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                        821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 521
                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                              761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCGTGGGAAGGAGCGGACCCTGCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACCCGAGGAACAACCTTAATGAAACTGACAGAGAACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGGCAAGGGGACGCAGGGAAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
         cerecrearecretricerectadecerectederecreterederecretered
                               CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                        CTCCAGTTCTGTCATCACCACCACCACTGTTCTGACGGTTCCATCCTGGCCATCGC 1080
                                                                                                                                                                                AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT 1020
                                                                                                                                                                                                                                                                                                                                    CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                           TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                   CTCCAGTTCTGTCATCATCACCACACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                           AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                      ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                          ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTGCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                              CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                        TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAA
```

600

540

520

580

480 460 420 400 360 340

1140

1120

1180

1060

1000

960

840

820 780

900 880

940

760

720

/codon start=1 /codon start=1 /product="anthrax toxin receptor/neuroblastoma fusion /product="anthrax toxin receptor/neuroblastoma fusion /protein transcript variant 2" /protein id="AAY18342.1" /db_xref="GI:52870887" /db_xref="GI:52870887" /fIDKSGSVLHHWNEIYYFVEQLAHKFISPQLRNSFIVFSTRGTTLMKLTEDREQI IYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQTRASTILALTDGELHEDLFFY RQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY SEREANRSEDLGAIVYCVGYKDFNETQLARIADSKHTVFPVEDGFQALQGIIHSILKK SCIEILAAAEPSTICAGESFQVVVRGNGFRHARVUDRVLCSFKINDSVTLNEKEFSVED TYLLCPAPILKEVCMKAALQVSMNDGLSFISSSVIITTTHCSDGSILAIALLILFLLL ALALLMWFWPLCCTVIIKEVPPPPAEESEIHIICRKSSRAEIKRLGSVVNLLYDPRMD NPAGSCSVLMRFWEASQIRKFPDAHKV"  misc_recomb /gene="ANTXR1/NNG1 fusion" /note="breakpoint junction"	/ Chromosome = 2.		/ or / ch	REFERENCE 2 (Dases 1 to 15 %) AUTHORS Obserthuer, A., Kahlert, Y., Spitz, R., Skowron, M., Westermann, F., Mehler, K., Berthold, F. and Fischer, M.  TITLE Direct Submitssion JOURNAL Submitted (14-FEB-2005) Pediatric Oncology and Hematology, Cologne Childrens Hospital, University of Cologne, Joseph-Stelzmann-Strasse 9, Cologne, NRW D-50924, Germany FEATURES 1, 1576  BOUXCE 1, 1576	Mammalia; Eutheria; Euarthontoglires; Primates; Cata Hominidae; Homo.  1 (bases 1 to 1576)  Oberthuer, A., Kahlert, Y., Spitz, R., Skowron, M., West Mehler, K., Berthold, F. and Fischer, M.  SAGE-based discovery and characterization of a novel the neuroblastoma cell lines IMR-5, IMR-5/75 and IMR Unpublished	variant: variant l GI:6287 l GI:6287 ens (human	OY 1141 CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197 
781 821 841 881 901 941 961	Qy 661 ACAGCTGGCCCGGATTGCGACAGTAAGATCATCTGTTTCCCGTGAATGACGCTTTCA 720	70	21 AGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATG	GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC	Qy 181 CGGGCAAGGGGAACGCAGGAAGGATGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA 240	Qy  1 AGGACCCGCGAGGAAGGACCCGCGATGGCCGTCTCTGAGGGTCCTGAGGGTCCCGCGGAGTTCGCGG 60	ORIGIN  Query Match Best Local Similarity 99.5%; Pred. No. 1.6e-288; Matches 1197; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

```
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                 gene
                                                                                      Sg
                                                                                                                                                                                                    Bource
                                                                                                                                                                                                                                                                                       Bource
                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 1658)

Oberthuer,A., Kahlert,Y., Spitz,R., Skowron,M.
Mehler,K., Berthold,F. and Fischer,M.

SAGE-based discovery and characterization of the neuroblastoma cell lines IMR-5, IMR-5/75
                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (14-FEB-2005) Pediatric Oncology and Hematology, Cologne Childrens Hospital, University of Cologne, Joseph-Stelzmann-Strasse 9, Cologne, NRW D-50924, Germany Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 (bases 1 to 1658)
Oberthuer, A., Kahlert, Y., Spitz, R., Skowron, M., Westermann, Mehler, K., Berthold, F. and Fischer, M.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AY928977 1658 bp mRNA linear PRI 10-MAY-2005
Homo sapiens anthrax toxin receptor/neuroblastoma fusion protein
transcript variant 4 (ANTXR1/NNG1 fusion) mRNA, complete cds.
AY928977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCTGCCGAGGAGAGTGAGATTCATAT 1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAATAA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTGCTGATCCTGCTCCTAGCCCTGGCTCTCCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT 1243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ccrecrearccrerrecrecraecccreecrererregreererregreereccerere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1203
                                                                                                                                                                                                                                                                                                              /organism="Homo Bapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="2"
/cell_line="IMR-5; IMR-32;
/codon_start=1
/product="anthrax toxin receptor/neuroblastoma
/protein transcript variant 4"
/protein_id="AAY18344.1"
                                                       /gene="ANTXR1/NNG1 fusion"
/note="transmembraneous re
                                                                                     /gene="ANTXR1/NNG1 fusion"
144. .1379
                                                                                                                                                                                                                                                                                                                                                                                        1. .1658
                                                                                                                                                                                                                                /db_xref="taxon:9606"
/chromosome="2"
                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                           organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                               map="2p24.3"
                                                                                                                                                                          organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                      1233. .1658
                                                                                                                                             db_xref="taxon:9606"
chromosome="2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:62870690
                                                                                                                                                                                                                                                                                                    _line="IMR-5; IMR-32; IMR-5/75"
_type="neuroblastoma cells"
                                                          receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Skowron, M., Westermann, F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a novel fusion gene and IMR-32
                                   fueion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ş
                             á
                                                               밁
                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
       밁
                                                                                   Ş
                                                                                                              밁
                                                                                                                                             Ś
                                                                                                                                                                           밁
                                                                                                                                                                                                5
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 1197, Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_recomb
       821
                                                                                                                     701
                                                                                                                                                 661
                                                                                                                                                                              641
                                                                                                                                                                                                       601
                                                                                                                                                                                                                                   581
                                                                                                                                                                                                                                                              541
                                 781
                                                               761
                                                                                         721
       TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                          GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                               GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                       ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                     ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                              TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGAGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                     TGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAA
```

```
/db_xref="G1:62870691"
/translation="MATAERRALGIGFQWLSLATLVLLCAGQGGRREDGGPACYGGFD
/translation="MATAERRALGIGFQWLSLATLVLLCAGQGGRREDGGPACYGGFD
LYFILDKGGSVLHHMMELYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQI
RQGLEELQKVLPGGDTYMHEGFERASEQIYENRQGYRTASVIIALTDGELHEDLFFY
SEREANRSRDLGAIVYCVGVKDPNETQLARIADSKDHVFVPNDGFQALGGIHSILKK
SCIELLAAEPSTICAGESFQVVVRGNGFRHARMVDRVLCSFKINDSVTLMSKPFSVEN
SCIELLAAEPSTICAGESFQVVVRGNGGLSFISSSVIITTHCSDGSILATALLILFLLL
ALALLMWFWPLCCTVIIKEVPPPPAEESEIHIICRKSSRAEIKRLGSVVNLLYDPRMD
NPAGSCSVLMRFWBASQVM"
1232~1233
```

```
/gene="ANTXR1/NNG1 fusion"
/note="breakpoint junction"
     84.4%;
Score 1193.4; DB 8;
Pred. No. 1.6e-288;
O: Mismatches 6:
                         Length 1658;
```

Matches	1197,	; Conservative 0; Mismatches 6; Indels 0; Gaps	0;
	ب :	AGGACCCGCGAGGAAGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG 60	5
	5	AGCGTGGGGAAGGGAGCCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG 1:	120
			9
	121	GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTTTTGGCCACTCTGGTGCTCATCTGCGC 1	180
	161	GAGAGCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC 2:	220
	181	CGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGATTTGACCTGTA 240	Ö
	221	CGGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA 280	ŏ
	241	CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTTGT 3	300
	281	CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAAATCTATTACTTTGT 3	340
	301	GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTC 3	360
	341	GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC 4	400
	361	CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAACAAATCCGTCAAGGCCT 4	420
	401	CACCCGAGGAACCATAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT 4	460
	421	AGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATG	480
	461	AGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATG	520
	481	GGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGGACAGCCAGC	540
	521	GCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCCAGC	580

720

760

660 640 600

```
RESULT 9
AY928974
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                  source
                                                                                                                                  Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                  Direct Submission
Submitted (14-FEB-2005) Pediatric Oncology and Hematology, Cologne
Childrens Hospital, University of Cologne, Joseph-Stelzmann-Strasse
9, Cologne, NRW D-50924, Germany
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 1496)
Oberthuer, A., Kahlert, Y., Spitz, R., Skowron, M., Westermann, F.,
Mehler, K., Berthold, F. and Fischer, M.
SAGE-based discovery and characterization of a novel fusion gene
the neuroblastoma cell lines IMR-5, IMR-5/75 and IMR-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AY928974 1496 bp mRNA linear PRI 10-MAY-20
Homo maplens anthrax toxin receptor/neuroblascoma fusion procein
transcript variant 1 (ANTXR1/NNG1 fusion) mRNA, complete cds.
AY928974
                                                                                                                                                                                                                                                                                                                                                     Oberthuer, A., Kahlert, Y., S
Mehler, K., Berthold, F. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AY928974.1
                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        - <u>Ş</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCTGCCGAGGAGAGTGAGATTCATAT 1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGCTGATCCTGTTCCTGCTCCTAGCCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ANANGANGTTGGCATGANAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 1496)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1203
                                                                                                                                                                  /db_xref="taxon:9606"
/chromosome="2"
/cell_line="IMR-5; IMI
                                                                  /mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="2"
                                                                                                                                                                                                               organism="Homo sapiens"
/mol_type="mRNA"
organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                 organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GI:62870684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                    line="IMR-5; IMR-32; IMR-5/75"
type="neuroblastoma cells"
                                                                                                                                                                                                                                                                                                                                                       Spitz,R., Skowron,M.,
d Fischer,M.
                                                                                                                                                                                                                                                                                                                                                                          Westermann,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRI 10-MAY-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         940
                                                                                                                                                                                                                                                                                                                                                                                                                                            ä
                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                               S
                                                                                     밁
                                                                                                             S
                                                                                                                                                       밁
                                                                                                                                                                                8
                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 1193;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_recomb
                                                       601
                                                                                                                                                         521
                                                                                                                                                                                       481
                                                                                                                                                                                                                        461
                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                          401
                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                            341
                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                             281
                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                μ
                                        CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                           CACCCGAGGAACAACCTTAATGAAACTGAACAGAAGACAGAGAAAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                          GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                               GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                             CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGGCAAGGGGACGCAGGGACGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGGGCAAGGGGAGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCGTGGGAAGGAGCCGGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGTGGGAAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /translation="MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
LYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQI
RQGLEBLQKVLPGGDTYMHSGFERASEQIYYENRQGYETASVITOGELHEDLFFY
SEREANRSRDLGAIVYCGYKDFNETQLAR IASKDHVFTASVITOGELHEDLFFY
SEREANRSRDLGAIVYCGYKDFNETQLAR IASKDHVFTASVITOSVTLNEKFFSVED
TYLLCFAPILKEVGMKAALQVSMNDGLSFISSSVIITTHCSDGSILAIALLILFLLL
ALALBSTICAGESFQVVVRGMSFRHARNVDRVLCSFKINDSVTLNEKFFSVED
TYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTHCSDGSILAIALLILFLLL
ALALLMWFWPLCCTVIIKEVPPPAEESEDGQPSWLMLRFDEVLGSKFDKEVS"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein transcript variant /protein_id="AAY18341.1" /db_xref="GI:62870685"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="ANTXR1/NNG1 fusion" 144. .1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /product="anthrax toxin receptor/neuroblastoma
protein transcript variant 1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /map="2p24.3"
1. .1496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="ANTXR1/NNG1 fusion"
/note="breakpoint junction"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="ANTXR1/NNG1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /chromosome="2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         note="transmembraneous"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  84.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1192.4; DB 8;
Pred. No. 2.8e-288;
); Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>,</u>
                                                           660
                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                            640
                                                                                                                             600
                                                                                                                                                           580
                                                                                                                                                                                            540
                                                                                                                                                                                                                             520
                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                400
                                                                                                                                                                                                                                                                                                                                                                                                                                340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                             460
```

ঠ В á 밁 Ş 밁 á 밁 á 밁 á 8 S

```
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 10
AY928976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                             Direct Submission
Submitted (14-FEB-2005) Pediatric Oncology and Hematology, Cologne Childrens Hospital, University of Cologne, Joseph-Stelzmann-Strasse 9, Cologne, NRW D-50924, Germany Location/Qualifiers
                                                                                                                                                                                                                                                                                     Hominidae; Homo.

1 (bases 1 to 1578)

Oberthuer, A., Kahlert, Y., Spitz, R., Skowron, M.
Mehler, K., Berthold, F. and Fischer, M.
SAGE-based discovery and characterization of the neuroblastoma cell lines IMR-5, IMR-5/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                transcript variant
AY928976
                                                                                                                                                                                                                     2 (bases 1 to 1578)
Oberthuer, A., Kahlert, Y., S
Mehler, K., Berthold, F. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AY928976.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AY928976 1578 bp mRNA linear PRI 10-MAY-20
Homo sapiens anthrax toxin receptor/neuroblastoma fusion protein
transcript variant 3 (ANTXR1/NNG1 fusion) mRNA, complete cds.
                                                                                                                                                                                                                                                                    Unpublished
                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGA 1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCAGTTCTGTCATCATCACCACCACCACCACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCTGCCGAGGAGAGTGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cerecrearecreterientecrecrecrecreserecreserecreserecrese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                     Bapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
           /cell_line="IMR-5; IMR-32; IMR-5/75"
/cell_type="neuroblastoma cells"
1. .1232
                                                          /organism="Homo sapiens"
/mol type="mRNA"
/db_xref="taxon:9606"
/chromosome="2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GI:62870688
sapiens"
                                                                                                                                                                                                                         Spitz,R., S
d Fischer,M.
                                                                                                                                                                                                                                                                                                                      Spitz,R., Skowron,M.,
d Fischer,M.
                                                                                                                                                                                                                                        Skowron, M.,
                                                                                                                                                                                                                                                                                       a novel fusion and IMR-32
                                                                                                                                                                                                                                                                                                                                         Westermann, F
                                                                                                                                                                                                                                          Westermann,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRI 10-MAY-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1234
                                                                                                                                                                                                                                                                                                         gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                           ä
                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                  밁
                                      S
                                                                              ₽
                                                                                                    S
                                                                                                                                            밁
                                                                                                                                                                          S
                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Si
Matches 1193;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_recomb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                  521
                                                481
                                                                                 461
                                                                                                                                               401
                                                                                                                                                                             361
                                                                                                                                                                                                             341
                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                             281
                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                            221
                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4
                                      CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                             GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                      GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                    CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCGCTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                          CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAGCCCTCGGCATCGGCTTCCAGTGGCCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGACCCGCGAAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                    CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                            CGGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                          GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /translation="Mataerralgigfowlslativilgagggrredggpacyggfd lyfildksggylhhwaeiyyfyeglankfispolras ivfstraftivilgagggrredgpacyggfd rogleelokvleggfdymhesgferaseoiyyenskyristaviialtdeelhbleffy seeanksrdlaaivycygykopretolrafiadskdhyppvnogfoalogiihsilkk scieilaaesgiyychcygklerhannvdrylcspkindsvytlnekfpsved tyllcarsfolvytrokkfpsved tyllcarsfolvytrokkfpsved tyllcarsfolvytrokkfpsved tyllcarsfolvytrokkfpsved tyllcarsfolvytrokkfpsved tyllcarsfolvytlnikkfpsved tyllcarsfolvytlnikkfpsved tyllcarsfolvytlnikkfpsved tyllcarsfolvytlnikkfpsved tyllcarsfolvytlnikkfpspspaessedgoswimlredevlgskfpdvynlikkcr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /codon_start=1
/product="anthax toxin receptor/neuroblastoma
protein transcript variant 3"
/protein_id="AAY18343.1"
/db_xref="GI:62870688"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /map="2p13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="ANTXR1/NNG1 fusion"
/note="breakpoint junction"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene="ANTXR1/NNG1 fusion"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /gene="ANTXR1/NNG1
|44. .1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          map="2p24.3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           organism="Homo sapie:
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1233. .1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           note="transmembraneous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chromosome="2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1192.4; DB 8;
Pred. No. 2.9e-288;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gapiene"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             fusion"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gape
                                                     540
                                                                                                                                                                                                                                                                                340
                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                   480
                                                                                                                                                 460
                                                                                                                                                                                 420
                                                                                                                                                                                                                  400
                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                280
                                                                                                                                                                                                                                                                                                                                                                                                             220
                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                       580
                                                                                     520
```

```
RESULT 11
AX458372
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                             8 8 8
                                                                                                                                                                                                                                                                                                                                                                  유 성 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                     FEATURES
                                          CDS
                                                                             source
                                                                                                                                                                                                                                                                                                                   1081
                                                                                                                                                                                                                                                                1181
                                                                                                                                                                                                                                                                                1141
                                                                                                                                                                                                                                                                                                 1121
                                                                                                                                                                                                                                                                                                                                    1061
                                                                                                                                                                                                                                                                                                                                                     1021
                                                                                                                                                                                                                                                                                                                                                                       1001
                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                        941
                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                           881
                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                          AX458372
Sequence 7 f
AX458372
AX458372.1
                                                                                   Young, J.A., Bradley, K.A., Collier, R.J.
Receptor for b. Anthracis toxin
Patent: WO 024628-A 7 13-JUN-2002;
WISCONSIN ALUMNI RESEARCH FOUNDATION (UNICOLUMNI CONTROL OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF T
                                                                                                                                                                  Homo
                                                                                                                                                 Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                         Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                      AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGA 1194
                                                                                                                                                                                                                                                                                                           CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                              CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                        ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAACCATCCACATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                 CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCTGCCGAGGAGAGTGAGGA
                                                                                                                                                                                                                                                                                                 cerecrearecrerecreceracecrecerecerecrecreserecreserecreserecere
                                                                                                                                                                                                                                                                                                                                    CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                  eapiens
                                                                                                                                                                           sapiens (human)
                                          50000
/note="unnamed protein product"
/codon_start=1
/coton_id="CAD38351.1"
/db_xref="d="CAD38351.1"
/translation="MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
                                                /organism="Homo sapiens"
/mol_type="unassigned DN
/db_xref="taxon:9606"
                                                                                                                                                                                                            from
                                                                                                                                                                                            GI:21725042
                                                                                                                                                                                                           2112 bp
Patent W00246228.
                                                                                                                                                 Chordata; Craniata; Vertebrata; Euteleo Euarchontoglires; Primates; Catarrhini;
                                                             DNA"
                                                                                                                                                                                                                      DNA
                                                                                                (us)
                                                                                                                        and
                                                                                                                        Mogridge,J
                                                                                                                                                                                                                       linear
                                                                                                                                                           Euteleostomi;
                                                                                                                                                                                                                       PAT
                                                                                                                                                                                                                       08-JUL-2002
                                                                                                                                                                                                                                                                 1234
                                                                                                                                                                                                                                                                                                                     1140
                                                                                                                                                                                                                                                                                                                                      1120
                                                                                                                                                                                                                                                                                                                                                       1080
                                                                                                                                                                                                                                                                                                                                                                         1060
                                                                                                                                                                                                                                                                                                                                                                                         1020
                                                                                                                                                                                                                                                                                                                                                                                                          1000
                                                                                                                                                                                                                                                                                                    1180
                                                                                                                                                                                                                                                                                                                                                                                                                           960
                                                                                                                                                                                                                                                                                                                                                                                                                                            940
                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
          8 B
                                                                                                                                                                   밁
                                                                                                                                                                              á
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                      ঠ
                                                        밁
                                                                          Ş
                                                                                               밁
                                                                                                           5
                                                                                                                             밁
                                                                                                                                              S
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Simi
Matches 1053;
           901
                            850
                                            841
                                                                                                730
                                                                                                                                   670
                                                                                                                                                   199
                                                                                                                                                                    019
                                                                                                                                                                                     601
                                                                                                                                                                                                        550
                                                                                                                                                                                                                                          490
                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                           430
                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                             370
                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                               310
                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                 250
                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                    190
                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                      130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                              790
                                                                                781
                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity 99.9
53; Conservative
ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74.4%;
```

LYFILDXSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQI
RQGLEBLQKVLFGGDTYMHEGFERASEQIYYENRQYTRASVILALTDGELHEDLFFY
SEREANRSRDLGAIYYCVGVKDFNETQLARIADSKDHYPVNOGFQALQGIHSILKS
SGIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLMEKPFSVED
TYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSLHKIASGPTTAACME"

Length

2112;

| CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGAAAGATTTCAATGAGAC TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT CGGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA CGGGCAAGGGGACGCAGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA AGCGTGGGAAGGAGCGCTCCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG AGGACCCGCGAGGAAGGGCCCGCGGATGCCGCTCCCTGAGGGTCGTGGCGAGTTCGCGG GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC Score 1052.4; Pred. No. 4.7e. 0; Mismatches 0 1052.4; DB 6; No. 4.7e-253; Indels <u>,</u> Gaps 180 189 720 609 600 549 540 489 480 420 369 360 309 300 249 240 129 120 69 909 900 849 840 789 780 729 669 660 429 0

```
JOURNAL
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
BC012074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                          REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Strauberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,

Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,

Altechul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,

Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,

Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,

Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,

Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,

Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,

Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,

MCKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,

Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,

Villalon, D.K., Muzny, D.M., Sodergren, B.J., Lu, X., Gibbs, R.A.,

Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,

Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,

Bouffard, G.G., Blakeeley, R.W., Touchman, J.W., Green, E.D.,

Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,

Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.

Generation and mouse cDNA sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          910
                                                              CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Genome Sequence Centre,
BC Cancer Agency, Vancouver, BC, Canada
info@bcgsc.bc.ca
Steve Jones, Sarah Barber, Mabel Brown-John, Yaron Butterfield,
Andy Chan, Steve S. Chand, William Chow, Alison Cloutier, Ruth
Featherstone, Malachi Griffith, Obi Griffith, Ran Guin, Nancy Liao
Kim MacDonald, Amara Masson, Mike R. Mayo, Josh Moran, Ryan Morin,
Teika Olson, Diana Palmquist, Anca Petrescu, Anna Liisa Prahbu,
Parvaneh Saeedi, JR Santos, Angelique Schnerch, Ursula Skalska,
Duane Smailus, Jeff Stott, Miranda Tsai, George Yang, Jacquie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (02-AUG-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
Clone distribution:
                                               Schein, Asim Siddiqui, Rob Holt, Marco Marra
                                                                                                                                                                                                                                                                                                                                                               Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                     NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Strausberg, R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ត្ត
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BC012074
BC012074.1 GI:15082332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BC012074 2112 bp mRNA linear PRI 29 Homo sapiens anthrax toxin receptor 1, transcript variant (cDNA clone MGC:19967 IMAGE:4563020), complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCCAGTTCTGTCATCATCACCACCACACACTGT 1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCAGTTCTGTCATCATCACCACACACACTGT 1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 2112)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      bases 1 to 2112)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens (human)
     <u>a</u>
     clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRI 29-JUN-2004
                                                                                                                                                                        Nancy Liao,
     found
                           S
                                                                           밁
                                                                                                                        Ş
                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 1053;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDS
                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130
                                                                             430
                                                                                                                                                                          370
                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                         310
                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                         250
                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
```

```
through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Series: IRAL Plate: 29 Row: g Column: 3
This clone was selected for full length sequencing because it
passed the following selection criteria: matched mRNA gi: 16933552.
                                                                                                                                                       /product="tumor endothelial m
/protein_id="AAH12074.1"
/db_xref="G::15082333"
/db_xref="GeneID:84168"
/db_xref="MIM:606410"
/trainlation="MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
LYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLFRNSFIVFSTGTTLMKLTEBREQI
RQGLEELQKVLFGGDTYMHSGFRASEGIYYBNRQVIIALTDGELHEDLFFY
SEREANRSRDLGAIYYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIHSILKK
SCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVED
TYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSLHKIASGFTTAACME"
                                                                                                                                                                                                                                                                                                                                                                             /db_xref="MIM:606410"
                                                                                                                                                                                                                                                                                                                                                                                                                  /note="synonyms: FLJ106(
/db_xref="GeneID:84168"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue type="Kidney, renal cell adenocarcinoma"
/clone lib="NIH MGC_14"
/lab_host="DH10B-R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /db_xref="taxon:9606"
/clone="MGC:19967 IMAGE:4563020"
                                                                                                                                                                                                                                                                                                                               /gene="ANTXR1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene="ANTXR1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               note="Vector:
                                                                                                                                                                                                                                                                                                        codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            _type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            pors7"
                                                                                                                                                                                                                                                                                                                                                                                                                                               FLJ10601,
                                                                                                                                                                                                                                                                                                                                                                                                                                               FLJ21776,
                                                                                                                                                                                                                                                                            marker 8, isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                               TEM8,
                                                                                                                                                                                                                                                                            W
                                                                                                                                                                                                                                                                            precursor"
```

Query Match
74.4%; Score 1052.4; DB 8; Length 2112;
Best Local Similarity 99.9%; Pred. No. 4.7e-253;
Matches 1053; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGGCAAGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCGTGGGAAGCGAGCCGGCTCTCCCCGGGCTGCGGCCATGGCCCACGGCGAGCG
                                                                                                                   CACCCGAGGAACAACCTTAATGAAACTGACAGAGACAGAGACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                 GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGACCCGCGAGGAAGGGCCCGCGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCCTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                               CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                       GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                           CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                          rgccaggagagacacttacatgcatgaaggatttgaaag
                                                                                                                      480
                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         69
                                                                                                                                                                                                                                                          369
                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                  309
                                                                                                                                                                                                                                                                                                                                                                                                                                        249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                              540
                                                                            489
                                                                                                                                                                  429
```

Culture,

```
PUBMED
REFERENCE
                                                                                                                                                                                                                                    JOURNAL
PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 13
AK223273
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                    TITLE
JOURNAL
                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                        AUTHORS
                                                                                                      AUTHORS
                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        490
3 (bases 1 to 2052)
Suzuki,Y., Sugano,S., Totoki,Y., Toyoda,A., Takeda,T.
Tanaka,A. and Yokoyama,S.
Direct Submission
Submitted (22-APR-2005) Akiko Tanaka, RIKEN Yokohama
Protein Research Group; 1-7-22 Suehiro, Tsurumi, Yoko
Kanagawa, 230-0045, Japan (E-mail:aktanaka@riken.jp,
URL:http://protein.gsc.riken.jp/, Tel:81-45-503-9452.
                                                                                                                                                                                                                                                                                                                                                                                                        AK223273.1 GI:62898106 FLI CDNA; oligo capping. Homo sapiens (human) Homo sapiens
                                                                                                                                                     Sugano,S.
Construction and characterization
S'-end-enriched cDNA library
Gene 200 (1-2), 149-156 (1997)
                                                                                                                                                                                                                                                                       Maruyama, K. and Sugano, S.
Oligo-capping: a simple method to replace enteryotic mRNAs with oligoribonuclectides
Gene 138 (1-2), 171-174 (1994)
                                                                                                                                                                                                                  Suzuki, Y., Yoshitomo-Nakagawa, K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        precursor variant,
AK223273
                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AK223273
                                                                                                                                                                                                                                                         8125298
                                                                                                                                                                                                                                                                                                                                                          Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCAGTTCTGTCATCATCACCACCACACACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCCAGTTCTGTCATCATCACCACCACACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2052 bp mRNA line for tumor endothelial marker , clone: STM07451.
                                                                                                                                                                                                                                                                                                                                                                          Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                        Maruyama,K.,
                                                                                                                                                                                        of
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1054
                                                    RIKEN Yokohama Institute,
                                                                                                                                                                                                                                                                                                         the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear PK1 .
                                                                                                                                                                                      length-enriched
                                                                                                        Takeda, T.,
                                                                                                                                                                                                                                                                                                           cap
                                                                                                                                                                                                                         Suyama, A.
                                         Yokohama,
                                                                                                                                                                                                                                                                                                             structure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRI 26-APR-2005
                                                                                                        Sakaki
                                                                                                                                                                                            and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        789
                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                        F
                                                                     Ś
                                                                                                                                  Ś
                                                                                                                                                                          밁
                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
        á
                                                                                                          В
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bource
                                                                                                                                                                                                                                                                                                                                                                            148
                                                                                                            388
                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1054;
        481
                                         448
                                                                         421
                                                                                                                                         361
                                                                                                                                                                            328
                                                                                                                                                                                                           301
                                                                                                                                                                                                                                              268
                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                             208
                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                              88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fax:81-45-503-9450)
This work was supported in part by the National Project on Proteir Structural and Functional Analysis, Ministry of Education, Culture Sports, Science and Technology of Japan.
Sumio Sugano, Yutaka Suzuki
Laboratory of Functional Genomics Department of Medical Genome Sciences Graduate School of Frontier Sciences The University of Tokyo, 4-6-1 Shirokanedai, Minato-ku, Tokyo 108-8639 Japan email:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 س
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ssugano@k.u-tokyo.ac.jp
URL: http://www.k.u-tokyo.ac.jp/index.html.en
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 h 74.4%;
Similarity 99.7%;
54; Conservative
                                                                                                                                                                          CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                             CGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                  CGGGCAAGGGGGACGCAGGGAGGATTGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                            gagaeccercegearececerrecaerecerererreeceaerecerereres
                                                                                                                                                                                                                                                                                                                                                                                                    GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCGTGGGAAGGAGCCGGCTCTCTCCCCGGGCTGTGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCTTCCCTGAGGGTCCTGGCGAGTTCGCGG
          CACCCGAGGAACAACCTTAATGAAACTGACAGAAAGACAGAGAAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                           CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                           /protein_id="BAD96993.1"
/db_xref="G1:62998107"
/db_xref="G1:62998107"
/translation="WathaERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
/translation="WathaERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
LYFILDKSGSVLHHWNEIYYFVEQLAHKFISPOLRMSFIVFSTRGTTLMKLTEDREQI
RQGLEELQKYLPGGDTYMHSGFERASEQIYENRAGGYRTASVIIALTDGELHBDLFFY
SEREANRSRDLGAIVYCWBGDFNETGLARIADSKDHVFPVNDGFQALQGIIHSILKK
SCIEILAABESTICAGESFQVVVRGMSFRHARNVDRVLRSFKINDSVTLNEKPFSVED
TYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       this clone is also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /codon_start=1
/evidence=not_experimental
/product="tumor endothelial marker 8 isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="STM07451"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       variant"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     note="cloning vector: pME18SFL3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       note="Start codon is not identified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        type="stomach mucosa"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 1052.2;
Pred. No. 5.2e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          named
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2; DB 8;
.2e-253;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         as hss001003689"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          w
```

Gaps

540 507 480 447 420 387 360 327 300 267 240 207 180 147 120 87 60 precursor

5 8 5 밁 5 밁 á В ર્ 밁 á B ર્ 8 δ 밁 á

유

```
RESULT 14
AR338517
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                              Query Match
Best Local S
Matches 908
                                                                                                                                                      EATURES
                                                                                                                                                                                                                                                                                                                            1048
                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                              Unknown.

Vinclassified.

1 (bases 1 to 1609)

Tangy, Y. T., Zhou, P. and Drmanac, R. T.
Nucleic acids and polypeptides
Patent: US 659662-A 8 27-MAY-2003;
Hyseq, Inc.; Sunnyvale, CA
                                                                                                                                                                                                                                                                                                                                                                                                   928
                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          628
                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  508
      266
                                          206
                                                                              tch 64.1%; slmilarity 99.8%; 908; Conservative
                        5
                                                                                                                                                                                                                                                  AR338517
Sequence 8
AR338517
AR338517.1
                                         AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                               AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                              ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCCAGTTCTGTCATCATCACCACCACACACACTGTTCT 1057
                                                                                                                                                                                                                                                                                                                                                                                                    ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                          /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                      from
                                                                                                                                                .1609
                                                                                                                                                                                                                                                   GI:33725374
                                                                                                                                                                                                                                                                   patent US
                                                                              0,
                                                                              Score 906.8; DB 6;
Pred. No. 1.7e-216;
0; Mismatches 2;
                                                                                                                                                                                                                                                                     1609 bp
S 6569662.
                                                                                                                                                                                                                                                                               DNA
                                                                                                Length
                                                                                                                                                                                                                                                                                 PAT 17-AUG-2003
                                                                               0
                          120
                                                                                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
        325
                                            265
                                                                                                                                                                                                                                                                                                                                                                                                                                         927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           687
       REFERENCE
AUTHORS
TITLE
                                                              CQ498433
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                    명
                                                                                                                                                                               δ
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                     1106
                                                                                                                                                                                                       1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                    901
                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                           986
                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                926
                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                    966
                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                         806
                                                                                                                                                                                                                                                                                                                                                                          109
                                                                                                                                                                                                                                                                                                                                                                                             746
                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                  Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa; C
Mammalia; Eutheria; E
Hominidae; Homo
                                                                                         CQ498433
Sequence 30300 1
CQ498433
CQ498433.1 GI:4
nge
        Schlegel,R.,
Genes differe
                                                                                                                                                                                                       CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                         CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGGCAAGGGGAGGAAGGATGGGGGGTCCAGCCTGCTACCGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGGAAACGGCTT
                                                                                                                                                                                                                                                                                         GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                              ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                             CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                    ACTCAGTAAG
                                                                                                                                                                                      ACTCAATGAG
                                                                                                                                                                                                                                                                                GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                      ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                         TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
        gel,R., Endege,W.O. and Monahan,J.F
differentially expressed in human
                                                                                            GI:41464069
                                                                                                                                                                     1115
                                                                                                                                                                                     910
                                                                                                              from Patent
                                            Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini;
                                                                                                                       1718
                                                                                                             18 bp DNA
WO0160860.
                  Ħ
        prostate
          cancer
                                                                                                                        PAT
          and
                                                                                                                        30-JAN-2004
           their
                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                              1045
                                                                                                                                                                                                                                                                                                                                                           865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            385
                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                       925
                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                805
                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                   745
                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
```

S 밁 성 유

Ś

유

밁

중 음 성

В Ş Ş 밁 á

밁

음 성

유정

```
δ
                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
source
                                                                                                                                            ર્
                                                                                                                                                                밁
                                                                                                                                                                            5
                                                                                                                                                                                              g
                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                      밁
           5
                             밁
                                            8
                                                          음 성
                                                                                           유 성 유
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 907; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
1150
                                 1090
                                                                  1030
                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                     550
                                                                                                                                                                                                                                                                                                                                                                      490
                                                                                                                                                                                                                                                                                                                                                                                                       430
                                                                                                                                                                                                                                                                                                                                                                                                                                        370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        310
                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                    670
                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                     610
                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                       121
               841
                                                                                                                                                                                                                                                    421
                                                 781
                                                                                 721
                                                                                                 970
                                                                                                                  661
                                                                                                                                  910
                                                                                                                                                  109
                                                                                                                                                                   950
                                                                                                                                                                                  541
                                                                                                                                                                                                   790
                                                                                                                                                                                                                                   730
                                                                                                                                                                                                                                                                                                                                                                                                                                                        13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent: WO 0160860-A 30300 23-AUG-2001;
Millennium Predictive Medicine, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG 120
                                                                                                                                                                                                                                                                                                                                                                                                      GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                    CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT 300
                                                                                                                                                                                                                                                                   CACCCGACGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                              GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                 CGGGCAAGGGGACGCAGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA 240
ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                 ĠĠĊĊĄĠŦĠĄĠĊĸĠĄŦŦŦĄŦŦĄŦĠĄĄĄĄĊĄĠĄĊĄĄĠĠĠŦĄĊĄĠĠĄĊĄĠĊŦĄĠĊĠŦĊĄŦĊĄŦ
                                                                                                                                                                                                            GGAACAGTTGGCTCACAAATTCATCAGCCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                       CGGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                 rgaaccarccacarargrocaggagagrcarrrcaagrrgrocaggagaggaaaccgcrr
                                                                  GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                           GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                         TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64.0%;
nilarity 99.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 905.2; DB 6;
Pred. No. 4.4e-216;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1718;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                    900
                                                                                     780
                                                                                                                     720
                                                                                                                                                                      909
                                                                                                                                                                                       600
                                                                                                                                                                                                       849
                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                       789
                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                         729
                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                         669
                                                                                                                                                                                                                                                                                                                                                                          549
                                                                                                     1029
                                                                                                                                                                                                                                                                                                                         360
                                                    840
                                                                     1089
                                                                                                                                      969
                                                                                                                                                      660
                                    1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

Qy 901 ACTCAATGAG 910 ||||| | | Db 1210 ACTCAGTAAG 1219

Search completed: December 18, 2005, 11:23:32 Job time : 7586.89 secs



```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92.
  11111111
1987
1987
                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
1414
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
11193.8
                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         •
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IDENTITY_NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-1
1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               December 17, 2005, 13:37:50 ; Search time 941.731 Seconds (without alignments)
10006.974 Million cell updates/sec
  Match Length DB
                                                                                                                                                                                                                  Query
                                                                                                                                                                                                                                                                                                       112::10:
                                                                                                                                                                                                                                                                                                                                                                                                                                          N_Geneseq_21:*
1: geneseqn198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4996997 seqs, 3332346308 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Listing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                           geneseqn2001as:*
geneseqn2001bs:*
geneseqn2002as:*
geneseqn2002bs:*
                                                                                                                                                                                                                                                                                                                                              geneseqn2003as:*
geneseqn2003bs:*
geneseqn2003cs:*
                                                                                                                                                                                                                                                                                                                                                                                                                               geneseqn1990s: *
                                                                                                                                                                                                                                                                                                                                                                                                                      geneseqn2000s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                           geneseqn1980e:*
                                                                                                                                                                                                                                                                                                                geneseqn2003ds:*
geneseqn2004as:*
geneseqn2004bs:*
                                                                                                                                                                                                                                                                                                      geneseqn2005s:*
  Match 100%
first 45 summaries
                                                                                                      10
10
14
14
                               11 10
          ADZ70742
AEAZ9804
AAD05303
AAD05333
AAD47456
ABV73883
AAA47456
ADI00533
ADM64567
ADI008809
ADM64575
                                                                                                                                                                  ABV73881
ABL92078
ABL92104
                                                                                                                         ABX72029
ABX72003
ADR48215
                                                                                                                                                         ABV73882
                                                                                                                                                                                                            님
                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9993994
Aby73881 Human ant
Ab1927078 Human Tum
Ab192104 Human Tum
Ab192104 Human Tum
Aby73882 Human ant
Abx72002 DNA encod
Abx72003 DNA encod
Adr48215 Human tum
Ad270742 Tumor end
Aea29804 DNA encod
Aea629804 DNA encod
Aad05303 Human sec
Aad05303 Human sec
Abv73883 Human TAN
Adm64557 Human von
Acn88807 Breast ca
Ad100549 Human TAN
Adm64567 Human TAN
Adm64578 Muman TAN
Adm64578 Mouse TAN
                                                                                                                                                                                                            Description
```

45	44	43	42	41	40	39	38	37	36	ა წ	34	<b>3</b> 3	32		30			27		25	24	23	22	21	20
853.4	853.4	853.4	867.6	867.6	890	890	894.6	905.2	906.8	906.8	906.8	906.8	914.4	914.4	950.8	950.8	951	951	951.4	951.4	951.4	951.4	952.4	952.4	952.4
60.4	60.4	60.4		61.4		62.9	63.3	64.0	64.1	64.1	64.1	64.1	64.7	64.7	67.2	67.2	67.3	67.3	67.3	67.3	67.3	67.3		67.4	67.4
5220	5220	5220	1623	1623	1436	1436	1608	1718	1609	1609	1609	1402	1047	1047	1650	1650	1008	1008	1713	1713	1056	1056	1650	1650	1650
10	σ	σ	11	10	σ	4.	10	v	y	v	4	4	11	10	H	10	1	10	11	10	11	10	H	11	10
ABX72010	ABL92138	ABL92085	ADM64587	ADI00543	ABV73884	AAH14331	ADI00567	ABV30282	ADB48098	ADQ98338	AAI58132	AAI59918	ADM64579	ADI00553	ADM64585	ADI00541	ADM64583	ADI00557	ADM64577	ADI00551	ADM64581	ADI00555	ADM64591	ADM64589	ADI00547
Abx72010 DNA encod	Ab192138 Mouse Tum	Mouse	7 TANG	Adi00543 Human TAN	Abv73884 Human ant	Human	J	Abv30282 Human pro					v	Human	TANGO		Human	Adio0557 Human TAN	Human	Human	Human	Adi00555 Human TAN	4591 TANGO		

## ALIGNMENTS

```
RESULT 1
ABV73881
IID V3887
XX
ABV73887
AC ABV7
XX
AC ABV7
DT 08---
XX
CHUMB
XX
CHUM
                             Novel isolated polypeptide useful for identifying agent that prevents reduces effect of anthrax toxin on host cell, for treating human or no human animal suffering from anthrax.
                                                                                                                                                                       WPI; 2002-713235/77.
P-PSDB; ABP54903.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human anthrax toxin receptor cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                     05-DEC-2000; 2000US-0251481P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-OCT-2001; 2001WO-US030941.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-JUN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Anthrax; toxin; receptor; human; antibacterial; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV73881;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABV73881 standard; cDNA; 1414 BP.
                                                                                                                                                                                                                                                                              Punox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200246228-A2
                                                                                                                                                                                                                                                                                                                                               (WISC ) WISCONSIN ALUMNI RES FOUND.
                                                                                                                                                                                                                                                                              JAT,
                                                                                                                                                                                                                                                                                 Bradley KA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= a
/product= "anthrax toxin receptor"
104. .182
/*tag= b
183. .1207
/*tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
104. .1210
                                                                                                                                                                                                                                                                                     Collier RJ,
                                                                                                                                                                                                                                                                                     Mogridge JS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88
```

non-

```
The present sequence is that of cDNA encoding a human surface-bound complete to the ATR, The cDNA is a PCR amplification product from Heia cells and human placenta cDNA libraries. Anthrax toxin compositions artigen (PA) binds to the ATR at a von Willebrand factor A commain located in the extracellular domain of ATR. The invention provides ATR polypeptides and polymucleotides, vectors, host cells, and transgenic cand knock-out animals. The invention also provides methods for composition and composition and the ATR and which reduce the toxicity of anthrax toxin. A claimed method for treating anthrax in a human or animal compositions and anistering an agent that inhibits binding between PA and ATR at a level effective to reduce the severity of anthrax. Suitable agents conclude ATR or a PA-binding fragment of ATR, a PA-binding polypeptide at colonal antibody, a polypaccharide, a lipid or a nucleic acid. ATR colymacleotides can also be used in the recombinant production of ATR colypaptides, and as molecular probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Simi
Matches 1414;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1414 BP; 394 A; 344 C; 344 G; 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
              661
                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                          661
                                                                                                         109
                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCGTGGGAAGGAGCGGACCCTGCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGACCCGCGAGGAAGGGCCCGCGGATTGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                         ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGGTGAATGACGGCTTTCA
                                                                                                                                   TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGTGTGTAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                   TGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGGGGCTAA
                                                                                                                                                                                                                                                                                                                                                                                               CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGGCAAGGGGACGCAGGAAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                        TGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
ilarity 100.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1414;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Τ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1414;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                               720
                                                                                                                                                            660
                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                  660
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                              Human; mouse; rat; TEM; tumour endothelial marker; NEM; PEM; cytostatic; normal endothelial marker; pan-endothelial marker; immunostimulant; antiangiogenic; tumour; neoangiogenesis; vascularised tumour; polycystic kidney disease; diabetes; retinopathy; rheumatoid arthritis;
                     01-AUG-2001; 2001WO-US024031
                                                                    07-FEB-2002
                                                                                                                                                                 Homo
                                                                                                                                                                                                                                                                                                                                                      Human Tumour
                                                                                                                                                                                                                                                                                                                                                                                                    30-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABL92078
                                                                                                                                                                                                             psoriasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                              sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCCAGTTCTGTCATCACCACCACCACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGTGCAACGTATTTTATACAATGCTCTGAAAATCATAGTCTCAATCTAGACAGTCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATAAAATAACAAGAAGAAGAAAGAAAGAAATCCCCACAGAAAACAGATAACCTAACACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGAGTGAGGAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          censensancenseriecesecialeces establishments de la consensance della consensance dell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANANGANGTTGGCATGANAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGACATGCCCGCAACGTGGACAGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    САЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛА
                                                                                                                                                                                                             gene;
                                                                                                                                                                                                                                                                                                                                                        Endothelial Marker polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1414
                                                                                                                                                                                                                                                                                                                                                          SEQ
                                                                                                                                                                                                                                                                                                                                                          IJ
                                                                                                                                                                                                                                                                                                                                                          ö
```

1260 1260 1200 1200 1140 1140

1320

1080 1020 1020 960 960 900 900 840 840 780 780

1080

밁 S

밁 δ 밁 δ B 5 ş 밁 á 밁 δ В Ş 밁 ş 밁 á 밁 Ş 밁 á

g

```
밁
                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 ई
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                  망
                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                              ঠ
ð
                          문
                                               á
                                                                           문
                                                                                                 δ
                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to an isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain of a tumour endothelial marker (TEM) protein selected from ABB90730, ABB90740, ABB90749, ABB90759 and ABB90769. The antibodies which bind to TEM proteins have cytostatic, immunostimulant and antiangiogeneis in subjects they are useful for inhibiting tumour growth, neoangiogeneis in subjects bearing a vascularised tumour, polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis and psoriasis. Human, mouse and rat TEM genes and the encoded proteins (ABL92075-ABL92141 and ABB90721-ABB90789) are disclosed, as are marker oligonucloctide sequences: tumour endothelial markers (TEM) ABL92042-ABL9204; and pan-endothelial markers (NEM) ABL92042-ABL92074; and pan-endothelial markers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  An isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain of a tumor endothelial marker (TEM) protein, useful for inhibiting tumor growth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-AUG-2000; 2000US-0222599P.
11-AUG-2000; 2000US-0224360P.
11-APR-2001; 2001US-0282850P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 121-123; 331pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OLYU (OLYU)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2002-291856/33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1195;
                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                221
                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                           101
 541
                          521
                                                  481
                                                                              461
                                                                                                      421
                                                                                                                                  401
                                                                                                                                                             361
                                                                                                                                                                                      341
                                                                                                                                                                                                                                            281
                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                      13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABL91903-ABL91995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGACCCGCGAGGAAGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                      GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                          CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT 300
                                                                                                                                                                                                                                                                                                              CGGGCAAGGGGACGCAGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA 240
                                                                                                                                                                                                                                                                                                                                                       GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                      GAGAGCCCTCGGCATCGGCTTCCAGTGGCCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                           AGCGTGGGAAGGGAACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                            AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGACCCGCGAGGAAGGCCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                        CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                        GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                             CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                 CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kinzler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNHOL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP; 1601 A; 1306 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                84.4%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                            Vogelstein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1193.8; DB 6;
Pred. No. 2.4e-285;
D; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ģ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ġ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5540;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                   280
                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100
                                                     540
                                                                                 520
                                                                                                          480
                                                                                                                                     460
                                                                                                                                                                420
                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                               340
                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                                                                                                                                                                                              160
    600
                                                                                                                                                                                           400
  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                            02-AUG-2000;
11-AUG-2000;
11-APR-2001;
                                                                                                                                                                                                   Human; mouse; rat; TEM; tumour endothelial marker; NEM; PEM; normal endothelial marker; pan-endothelial marker; immunostim antiangiogenic; tumour; neoangiogenesis; vascularised tumour; polycystic kidney disease; diabetes; retinopathy; rheumatoid
                                                                                                                                                                Homo
                                                                                                                                                                                                                                                                        Human Tumour Endothelial Marker polynucleotide
                                                                                                                                                                                                                                                                                                                                                        ABL92104 standard;
                                                                                 01-AUG-2001; 2001WO-US024031
                                                                                                            07-FEB-2002
                                                                                                                                       WO200210217-A2
                                                                                                                                                                                         psoriasis; gene;
                                                                                                                                                                                                                                                                                                    30-MAY-2002
                                                                                                                                                                                                                                                                                                                               ABL92104;
    VIND (OCYU)
                                                                                                                                                                                                                                                                                                                                                                                                                            1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC 1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT 1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cerecrearecretricereceraececreeerecreerecreerecreeececerere
     JOHNS HOPKINS
                             2000US-0222599P
2000US-0224360P
2001US-0282850P
                                                                                                                                                                                                                                                                                                    (first
                                                                                                                                                                                                                                                                                                                                                        CDNA;
                                                                                                                                                                                                                                                                                                    entry)
                                                                                                                                                                                                                                                                                                                                                          5540
```

1080

1180

960

940 900 880 840 820 780 760 720 700

1000

SEQ ij

ö 231.

immunostimulant;

cytostatic;

arthritis;

```
Query Match
Best Local Sim:
Matches 1195;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               proteins have cytostatic, immunostimulant and antiangiogenic activity. They are useful for inhibiting tumour growth, neoangiogenesis in subjects bearing a vascularised tumour, polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis and psoriasis. Human, mouse and rat TEM genes and the encoded proteins (ABL92075-ABL92141 and ABB90721-ABB90789) are disclosed, as are marker oligonucleotide sequences: tumour endothelial markers (TEM) ABL99195-ABL92041 and ABL92133-ABL92191; normal endothelial markers (NEM) ABL92042-ABL92074; and pan-endothelial markers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to an isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain of a tumour endothelial marker (TEM) protein selected from ABB90732, ABB90740, ABB90749, ABB90750 and ABB90769. The antibodies which bind to TEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          An isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain of a tumor endothelial marker (TEM) protein, useful for inhibiting tumor growth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               St Croix B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 5540 BP; 1601 A; 1306 C; 1187 G; 1446 T; 0
                                              581
                                                                                        541
                                                                                                                                         521
                                                                                                                                                                                      481
                                                                                                                                                                                                                                       461
                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                  401
                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                             341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABL91903-ABL91995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                    CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGGGCAAGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCGTGGGAAGGAGCCCTGCTCTCCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                    CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                         TGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGAAGGCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kinzler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   207-209; 331pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vogelstein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1193.8; DB 6;
Pred. No. 2.4e-285;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  U; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                           600
                                                                                                                                            580
                                                                                                                                                                                        540
                                                                                                                                                                                                                                       520
                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                    460
                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                  400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
RRESULT 4
ABV73882
ID ABV7
XX ABV7
XX ANTH
CON ANTH
CON ANTH
XX ANTH
X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                              mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anthrax; toxin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABV73882;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABV73882
                                                                       05-DEC-2000; 2000US-0251481P
                                                                                                                   03-OCT-2001;
                                                                                                                                                                                                                                                                                                                               sig_peptide
                                                                                                                                                                  13-JUN-2002
                                                                                                                                                                                                                 WO200246228-A2
                        (WISC ) WISCONSIN ALUMNI RES FOUND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard;
                                                                                                                      2001WO-US030941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
                                                                                                                                                                                                                                                        /*tag=
                                                                                                                                                                                                                                                                                                                                                                                   *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
```

S

밁 S

Ş 밁 밁 5 В á 밁 δ 밁 Ś 밁 ঠ 밁 S 밁 Ş 밁 S

```
Human anthrax toxin receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCTGCCGAGGAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCTGGTGGTTCTGGCCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTGCTGATCCTGCTCCTGCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCAGTTCTGTCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
/product= |
144..224
/*tag= b
225..1838
/*tag= c
                                                                                                                                                                                                                                  receptor; human; TEM8;
                                                                                                                            144. .1838
                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                     CDNA; 5540
                                                                                       "anthrax toxin receptor"
                                                                                                                                                                                                                                                                           CDNA.
                                                                                                                                                                                                                                                                                                                                                                                                       ВP
                                                                                                                                                                                                                                    antibacterial;
                                                                                                                                                                                                                                  gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       700
```

```
The present sequence is that of cDNA encoding a human anthrax toxin CC receptor (ATR). The cDNA, previously designated TEMB, was originally CC isolated by PCR from HeLa cell and human placenta cDNA libraries. It was cidentified in a database screening using a newly isolated human cDNA (see ABV73881) which encodes an ATR (see ABP54903) that is identical to the CC TEMB polypeptide except in the cyroplasmic tail, suggesting differential CC splicing of a primary mRNA transcript. TEMB was not previously identified CC as an ATR. The invention provides ATR polypeptides and polynucleotides, CC host cells, vectors, and transgenic and knock out animals. It also provides methods for identifying molecules that bind the ATR and which CC reduce the toxicity of anthrax toxin. A claimed method for treating CC anthrax in a human or animal involves administering an agent that CC alevel effective to reduce the severity of anthrax. Suitable agents CC include the TEMB polypeptide or a PA-binding fragment of it, a PA-binding CC monoclonal or polyclonal antibody, a polysaccharide, a lipid or a nucleic acid. ATR polypeptides can also be used in the recombinant production CC of ATR polypeptides, and as molecular probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 1195; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel isolated polypeptide useful for identifying agent that prevents or reduces effect of anthrax toxin on host cell, for treating human or non-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 32-37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gung
                                                                                                                                                                                                                    341
                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                              461
                                                                                                                421
                                                                                                                                                  401
                                                                                                                                                                                  361
                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                      281
                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                          221
                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
              521
                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        animal suffering from anthrax.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JAT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABP54904.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5540
                                                                                                                                                                                                                                                                                                                                                                              CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                              CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                       CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                    GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                             GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                          CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                            CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
              Bradley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 1601 A; 1306 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                84.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        45pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Collier RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 1193.8; DB 6;
Pred. No. 2.4e-285;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1187 G; 1446 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mogridge JS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5540;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                        340
                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                            280
                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
              580
                                                                                  520
                                                                                                                                                    460
                                                                                                                                                                                                                      400
                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
ABX72029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                      pan-endothelial marker; polycystic kidney disease; psoriasis;
diabetic retinopathy; rheumatoid arthritis; tumour angiogenesis;
neoangiogenesis; immune response; cytostatic; antidiabetic; gene
                                                                                                                                                                      Homo
                                                                                                                                                                                                    neoangiogenesis; ophthalmological;
                                                                                                                                                                                                                                                                                                                                                                                                                                ABX72029
              11-APR-2001;
06-FEB-2002;
                                                                                                  24-OCT-2002
                                                                                                                                                                                                                                                                          Tumour
                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                             12-MAR-2003
                                                                10-APR-2002;
                                                                                                                                    WO200283874-A2
                                                                                                                                                                                                                                                                                                                        encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1001
                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                      endothelial cell; EC; tumour endothelial cell; TEM; endothelial marker; PEM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCCAGTTCTGTCATCATCACCACCACCACCACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGCTGGCCCGGATTGCCGGACAGTAAGGATCATGTTTTCCCGTGAATGACGGCTTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ccrecrearccrecrecrecraeccrecrecrecrecreererrerecrecrecrere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTGCTGATCCTGCTCCTGCTCCTAGCCCTGGCTCCTCTGGTGGTTCTGGCCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC 1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001US-0282850P
2002US-0354262P
                                                                  2002WO-US008253
                                                                                                                                                                                                                                                                                                                          human tumour endothelial marker
                                                                                                                                                                                                                                                                                                                                                             (first
                                                                                                                                                                                                       antirheumatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                             entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                5540
```

1080 1060

960 1000

940 900 880 840 820 780

760 720 660 640

700

1180

ВP

antiarthritic;

ntidiabetic; gene; antipsoriatic; ds

NEM

S 밁 S 밁 ঠ 밁 Ş 밁 ঠ 밁 á 밁 Ś 밁 á

밁 ş 밁

```
á
                                                                                                                                                                   밁
                                                                                                                                                                                           중 유
                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                      δ
                                                                                                                 밁
                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to a novel method for the isolation of endothelial cells (ECs), and the identification of genes expressed in normal and tumour ECs. Tumour endothelial marker (TEM), normal endothelial marker (NEM), and pan-endothelial marker (PEM) genes are identified in human ECs. The human EC marker proteins and the polymucleotide sequences encoding them are useful for detecting, diagnosing or treating tumours as well as polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis, and psoriasis. They are also useful for inhibiting neoangiogenesis or tumour anglogenesis, for inducing an immune response to tumour endothelial cells in a patient, or for identifying candidate drugs for treating tumours. The present sequence represents a human TEM or NEM gene of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 5540 BP; 1601 A; 1306 C; 1187 G; 1446 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New purified human transmembrane protein, designated as tumor endothelial marker (TEM) 3, useful for detecting, diagnosing or treating tumors, polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYJO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1195;
             581
                                     541
                                                               521
                                                                                       481
                                                                                                                  461
                                                                                                                                        421
                                                                                                                                                                    401
                                                                                                                                                                                              361
                                                                                                                                                                                                                        341
                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                         281
                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                           221
                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VIND
                                                                                                                                                                                                                                    GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                              GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                          CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTTGT
                                                                                                                                                                                                                                                                                                                           CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                            CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCGTGGGAAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                  GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                           CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOHNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    223-225; 374pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₿,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1193.8; DB 1
Pred. No. 2.4e-285;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kinzler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    XΨ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vogelstein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                        600
                                                               580
                                                                                         540
                                                                                                                  520
                                                                                                                                            480
                                                                                                                                                                       460
                                                                                                                                                                                               420
                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                           340
                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                              280
                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                         400
                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                         Human; endothelial cell; EC; tumour endothelial cell; TEM; NEM; Tumour endothelial marker; normal endothelial marker; PEM; pan-endothelial marker; polycystic kidney disease; psoriasis; diabetic retinopathy; rheumatoid arthritis; tumour angiogenesis; neoangiogenesis; immune response; cytostatic; antidiabetic; gene ophthalmological; antirheumatic; antiarthritic; antipsoriatic; descriptions.
                                                                                                                                                                                                                                                                                                    DNA encoding
              Carson-Walter E,
                                                                                                                                 24-OCT-2002
                                                                                                                                                         WO200283874-A2
                                                                                                                                                                                                                                                                                                                              12-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                ABX72003 standard;
                                                                                                      10-APR-2002; 2002WO-US008253
                                        (UYJO ) UNIV JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAGA 1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTGCTGATCCTGCTCCTAGCCCTGGCTCCTCTCGGTGGTTCTGGCCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                2001US-0282850P
2002US-0354262P
                                                                                                                                                                                                                                                                                                    human tumour endothelial marker
                                                                                                                                                                                                                                                                                                                              (first
              38
                                                                                                                                                                                                                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                                                                                                              entry)
              Croix B,
                                                                                                                                                                                                                                                                                                                                                                                 5540
                                                                                                                                                                                                                                                                                                                                                                                 ВÞ
                Kinzler KW,
                Vogelstein
                                                                                                                                                                                                                                                                                                       HEM
```

1120 1080 1060 1020 1000 960

880

840 820 780 760

940 900

```
ঠ
                                                                                                                                                                     밁
                                                                                                                                                                                      5
                                                                                                                                                                                                         밁
                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZZCCCCCCCCCCCXZXCCCCCXXX
                                                                                   밁
                                                                                                       δ
                                                                                                                             문
         밁
                      Ş
                                                밁
                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a novel method for the isolation of endothelial cells (ECs), and the identification of genes expressed in normal and tumour ECs. Tumour endothelial marker (TEM), normal endothelial marker (NEM), and pan-endothelial marker (PEM) genes are identified in human ECs. The human EC marker proteins and the polynucleotide sequences encoding them are useful for detecting, disposing or treating tumours as well as polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis, and psoriasis. They are also useful for inhibiting neoangiogenes to rumour angiogenesis, for inducing an immune response to tumour endothelial cells in a patient, or for identifying candidate drugs for treating tumours. The present sequence represents a human TEM or NEM gene of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New purified human transmembrane protein, designated as tumor endothelial marker (TEM) 3, useful for detecting, diagnosing or treating tumors, polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis or psoriasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-093016/08
P-PSDB; ABU54430.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 117-120; 374pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                cal Similarity
                                                                                                                                                                                                              341
                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                        161
                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                           481
                                                                                                                               461
                                                                                                                                                  421
                                                                                                                                                                       401
                                                                                                                                                                                           361
                                                                                                                                                                                                                                                        281
                                                                                                                                                                                                                                                                                                221
                                                                                                                                                                                                                                                                                                                                                           121
         641
                           109
                                                581
                                                                   541
                                                                                       521
                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                       41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5540
                                                                                                                                                                                                                                                                                                           CGGGCAAGGGGACGCAGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGACCCGCGAAGGAAGGGCCCGCGATGCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                        CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                           GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTTATTGTTTTCTC
                                                                                                                                                                                                                                                        CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                   CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAATGAAATCTATTACTTTGT 300
                                                                                                                                                                                                                                                                                                                                        GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                 AGCGTGGGAAGGAGCGGACCCTGCTCCCCGGGCTGCGGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                             AGCGTGGGAAGGGAGCGGACCCTGCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                      AGGACCCCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCCG
                    TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                           CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                               GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                CGGGCAAGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
         TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGTGAAAGATTTCAATGAGAC
                                                                                                                                84.4%;
llarity 99.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 1601 A; 1306 C; 1187 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1193.8;
Pred. No. 2.4e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                2.4e-285;
ches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1446 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5540;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                        340
                                                                                                                                                                                                                                                                                                 280
                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                          100
                             660
                                                                                        580
                                                                                                             540
                                                                                                                                 520
                                                                                                                                                    480
                                                                                                                                                                         460
                                                                                                                                                                                            420
                                                                                                                                                                                                                400
                                                                                                                                                                                                                                                                                                                                         220
         700
                                                  640
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                          ADR48215
                                                                                                    18-FEB-2004;
                                                                                                                                            WO2004074510-A1
                                                                                                                                                                                                                                                                                                  18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1001
                                                                                                                                                                                                                sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                       P
                                                           GARVAN
```

```
WPI; 2004-635591/61.
P-PSDB; ADR48216.
                                                                                                                                                                                                                                                                                                                                                                                                                                          pancreatic cancer-associated transcript; pancreati
cytostatic; gene therapy; protein therapy;
tumour endothelial marker 8 precursor; TEM8; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human tumour endothelial marker 8
                                                                                                                                         18-FEB-2003; 2003AU-00900747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGCTGATCCTGCTTCCTAGCCCTGGCTCTCTCTGGTGGTTCTGGCCCCTCTG 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCCAGTTCTGTCATCATCACCACCACACACTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAGA
                                                          Segara
                                                                                                                                                                                  2004WO-AU000194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first
                                                                                                     TSNI
                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                       product= "tumour endothelial marker 8 precursor
                                                            'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA;
                                                                                                       MEDICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
                                                              Henshall
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5540
                                                                                                       RES.
                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             precursor encoding
                                                                Sutherland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pancreatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rcreaceerrccarccreeccarcec 1120
                                                                æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ:3.
                                                                                                                                                                                                                                                                                                         (TEM8) "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
```

```
The present invention describes a method for detecting a pancreatic CC cancer-associated transcript in a biological sample. The method comprises CC contacting the biological sample with a polynucleotide that selectively CC hybridises to a sequence at least 80% identical to a sequence as shown in any one of Tables 3 to 25 in the specification or having the GenBank CC Accession Number AF279145. Also described: (1) diagnosing pancreatic C2 cancer in a human or animal subject being tested, determining the CC caterining the suitability of a subject having a pancreatic cancer will survive, or CC determining the suitability of a subject having a pancreatic cancer for CC surgical resection therapy; (2) detecting a pancreatic cancer associated polypeptide in a biological sample; (3) determining the likelihood that a cc subject having a pancreatic cancer associated cancey of a therapeutic treatment of pancreatic cancer. A pancreatic cancer associated transcript has cytostatic cancer associated transcript cancer associated polypeptide or an antibody that binds to the isolated polypeptide can be used in CC generatic or prognosing or prognosing pancreatic cancer. The prognostic or diagnostic methods are useful for the early detection of pancreatic cancer or its metastases, and for monitoring the prognostic or diagnostic methods are useful for the early detection of pancreatic cancer or its metastases, and for monitoring the prognostic or the metastases, and for monitoring the prognostic or sequence encodes human tumour endothelial marker 8 precursor (TEM8), which is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 1195; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Detecting pancreatic cancer-associated transcript in a biological sample, useful for diagnosing or treating the disease, comprises contacting the sample with a polynucleotide that selectively hybridizes to a specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 5540 BP; 1601 A; 1306 C; 1187 G; 1446 T; 0 U; 0 Other;
461
                                                            421
                                                                                                                        401
                                                                                                                                                                                 361
                                                                                                                                                                                                                                             341
                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                      281
                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                           CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGACCCGCGAGGAAGGGCCCGCGGATTGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                  CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                    GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                      GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                         CTTCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
   SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                      GGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1193.8; DB 1
Pred. No. 2.4e-285;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
   520
                                                               480
                                                                                                                           460
                                                                                                                                                                                                                                                    400
                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                         340
                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            160
```

```
1081
                                                                                                                                                            1061
                                                                             1121
                                                                                                                                                                                                                                             1001
                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAA
                     CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                    AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                       AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                            ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCTGGCCCGGATTGCCGGACAGTAAGGATCATGTGTTTTCCCGGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAGA 1237
                                                                               CCTGCTGATCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCCTCTG
                                                                                                                                                                CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                     CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                              ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                             CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCCGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                1120
                                                                                                                                                                                                         1080
                                                                                                                                                                                                                                                 1060
                                                                                                                                                                                                                                                                                        1020
                                                                                                                                                                                                                                                                                                                                1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              700
                                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                                                940
                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
```

밁

S 문 S

δ 문 δ

밁

밁 á 밁 ঠ 밁 5 밁 Ş 밁 S 片 S

ADZ70742 standard; CDNA; 5540

(first entry)

밁

Ş 밁 Ş

밁 á 밁 ঠ

Tumor endothelial marker 8 precursor (Tem8) CDNA

RESULT 8
ADZ70742
IID ADZ70742
AC ADZ7
XX ADZ7
XX ADZ7
XX OSTE
KW OSTE
KW WILSE
KW WILSE
XX MUSS
XX HOME
XX WO20
XX WO osteopathic; antiarthritic; gene expression; differentiation; transcription; bone disease; osteoarthritis; antiarthritic; o musculoskeletal disease; tumor enothelial marker 8 precursor; osteopathic;

Homo sapiens

WO2005038022-A1

δ 밁 Ś 밁 δ 밁 ð

á В

481

540

580

521

20-OCT-2004; 2004WO-JP015879

20-OCT-2003; 2003JP-00359172

TEIJIN KOMORI

```
문
                                                                                                         र्
                                                                                                                                 밁
                                                                                                                                              ક
                                                                                                                                                                       밁
                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                밁
                                                               र्
        吊
                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 1195;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention describes acquiring (M1) a pathological condition related gene, preferably chondrogenic differentiation control related gene Runx2/Cbfal, comprising forcibly expressing a transcriptional factor related to pathological condition, preferably Runx2/Cbfal in a cell strain or a primary culture cell lacking the transcriptional factor, and screening for the gene whose expression is induced or suppressed. (M1) is useful for acquiring a pathological condition related gene, preferably chondrogenic differentiation control related gene Runx2/Cbfal. Belynucleotides detailed in the invention are useful for screening a preventive and/or therapeutic agent of bone and/or articular disease such as osteosatthritis. This sequence encodes tumor enothelial marker 8 precursor (Tem8) associated with isolation of a pathological condition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Acquiring chondrogenic differentiation control related gene Runx2/Cbfal, by forcibly expressing transcriptional factor related to pathological condition in cell strain lacking transcriptional factor and screening fo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Komori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2005-322866/33.
)B; ADZ70743.
                                                                                                                                                                                                                                                                                                      161
                                                                                         461
                                                                                                                                  401
                                                                                                                                                    361
                                                                                                                                                                           341
                                                                                                                                                                                                                    281
                                                                                                                                                                                                                                                             221
                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                101
                             541
                                                                     481
                                                                                                            421
                                                                                                                                                                                               301
                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15;
        581
                                                  521
                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene.
                                                                                                                                                                                                                                                                                                                  GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                      AGGACCCGCGAGGAAGGGCCCGCGGATTGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                            AGCGTGGGAAGGGAGCGGACCCTGCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5540
                    TGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAA 600
                                                            CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGACAAATCCGTCAAGGCCT
                                                                                                                                                      CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTC 360
                                                                                                                                                                                                                                CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT 300
                                                                                                                                                                                                                                                                           CGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                        GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                AGCGTGGGAAGGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                          AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                           GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                     CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
         SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kanatani
                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 1601 A; 1306 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     z
                                                                                                                                                                                                                                                                                                                                                                                                                                           84.4%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             357pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Yoshida
                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1193.8; DB 14;
Pred. No. 2.4e-285;
0; Mismatches 2; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1187 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zanma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1446 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kobayashi
                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ώ
                                                                                                                                                                                                                                                                                                                                                                                                                                                       5540;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           screening for
                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Yamana
                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (M1) is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             such
                                                                                                                                                                                                                                                                                                                                                                                          100
                                                                                                                                                                                                                                                               280
                                                                                                                                                                                                                                                                                                                           180
                                                                       540
                                                                                           520
                                                                                                              480
                                                                                                                                   460
                                                                                                                                                        420
                                                                                                                                                                             400
                                                                                                                                                                                                                     340
                                                                                                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                  580
5
                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
```

```
RESULT 9
AEA29804
                                                                 02-JUN-2005
                                                                                                 WO2005048943-A2
                                                                                                                                                                                                                                                       synergistic induction; tumor-associated antigen; vaccine; tumor endothelial marker 8; immune stimulation; cytostati
                                                                                                                                                                                                                                                                                                       DNA encoding
                                                                                                                                                                                                                                                                                                                                           11-AUG-2005
                                                                                                                                                                                                                                                                                                                                                                             AEA29804;
                                                                                                                                                                                                                                                                                                                                                                                                             AEA29804
                                15-NOV-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1001
                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCCAGTTCTGTCATCATCACCACCACCACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                               standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCCTCTTGGTGGTTCTTGGCCCCTCTG 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCGACATGCCCGCAACGTGGACAGGGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                2004WO-US038022
                                                                                                                                                                                                                                                                                                         a human tumor endothelial marker 8
2003US-0519498P
                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                               5540
                                                                                                                                   "Human
                                                                                                                                                                                                                                                                                                                                                                                                               ΒP
                                                                                                                                     tumor
                                                                                                                                     endothelial
                                                                                                                                                                                                                                                         cytostatic;
                                                                                                                                                                                                                                                                                                         protein.
                                                                                                                                     marker
                                                                                                                                     8
                                                                                                                                   protein"
                                                                                                                                                                                                                                                         gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       760
```

Gregor

Ψ,

Houghton

P

Concetti

Venanzi

¥

(SLOK ) SLOAN KETTERING INST CANCER RES

```
ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                          밁
                                                                                     ş
                                                                                                                     밁
                                                                                                                                             र्
                                                                                                                                                                                                                                           밁
                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 further includes a method of inducing anti-tumor immune responses in an individual, comprising administering to the individual a composition cited above or dendritic cells comprising a nucleic acid or protein selected from the composition cited above and proteins encoded by the vectors of the composition. The methods and compositions of the present invention are useful in the field of anti-tumor immunity, in particular for inducing an anti-tumor immune response by targeting both tumor—associated antigens and tumor endothelia, hence have cytostatic activity. This polynucleotide sequence represents the DNA encoding a human tumor endothelial marker 8 protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New composition useful as a vaccine for inducing anti-tumor immune response and having a vector with a nucleic acid sequence encoding a tumor-associated antigen and/or encoding a tumor endothelial marker 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to novel compositions and methods for the synergistic induction of antitumor immunity. The invention discloses a synergistic effect between vaccines encoding a tumor-associated antigen and vaccines encoding a tumor endothelial marker 8 (TEM8). The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2005-395941/40.
                                                          581
                                                                                       541
                                                                                                                     521
                                                                                                                                                  481
                                                                                                                                                                                461
                                                                                                                                                                                                                                             401
                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                        341
                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                    281
                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6
                            601
                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AEA29805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
               TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                 CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                           GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAGCCCTCGGCATCGGCTTCCAGTGGCCTCTTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 4; 54pp; English.
                                                                            GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                      CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                 CGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCGTGGGAAGGGACCCTGCTCTCCCCGGGCTGCGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGACCCGCGAAGGAAGGCCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5540
TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGGAAAGATTTCAATGAGAC
                                                            CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                    CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 1601 A; 1306 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1193.8; DB 14;
Pred. No. 2.4e-285;
0; Mismatches 2; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1187 G; 1446 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ç,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                           400
                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                      340
                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                  280
                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                              660
                                                            640
                                                                                          600
                                                                                                                         580
                                                                                                                                                    540
                                                                                                                                                                                  520
                                                                                                                                                                                                                                              460
```

맑

641

```
RESULT 10
AADO5303
ID AADO55
XX AADO55
XX 17-JU
XX Human
XX Human
XX Human
XX infla
KW infla
KW inmun
KW cardi
KW cardi
KW cardi
KW chemc

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  吊
                                                                                                                                                                                                                                                                                                                                                                                                                Human; secreted protein; proliferative disorder; cancer; tumour; foetal abnormality; developmental abnormality; haematopoletic disorder; immune system disorder; AIDS; autoimmune disease; rheumatoid arthritis; inflammation; allergy; neurological disorder; Alzheimer's disease; parkinson's disease; cognitive disorder; schizophrenia; asthma; skin disorder; psoriasis; sepsis; diabetes; atherosclerosis; cardiovascular disorder; angiogenic disorder; kidney disorder; gastrointestinal disorder; pregnancy-related disorder; gastrointestinal disorder; promancy-related disorder; cell culture; chemotaxis; food additive; gene therapy; binding partner identification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAD05303;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAD05303
     WO200134626-A1
                                                                                                             mat_peptide
                                                                                                                                                                 sig_peptide
                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              secreted protein-encoding gene 4 cDNA clone HWLFR02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                standard; cDNA; 2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTGCTGATCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCTGGTGGTTCTTGGCCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCAGTTCTGTCATCATCACCACACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                               19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                          /product=
140. .220
/*tag= b
                                                         /*tag= c
/product=
                                                                                                                /*tag= b
221. .1348
                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                                                                                                             þ
                                                                                                                                                                                                      "Human
                                                               "Mature human
                                                                                                                                                                                                      secreted
                                                            secreted protein"
                                                                                                                                                                                                 protein'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NO:14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
```

```
밁
                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                          CC AADDS300-AADDS379 represent cDNAs corresponding to 28 human secreted correcting genes, and AAED1436-AAED1513 represent the proteins they encode. CC AAED1514-AAED1544 represent human secreted protein fragments or variants. CC The genes and their secreted proteins are useful for preventing, treating corrections are useful for preventing. Treating corrections are useful for preventing the amount of the new genes and their secreted proteins are useful for preventing the amount of the new genes. Specific uses are described for each of the 28 genes, the new genes. Specific uses are described for each of the 28 genes, considers, cancer, tumours, foetal and developmental abnormalities disorders, cancer, tumours, foetal and developmental abnormalities. CC peopletic disorders, diseases of the immune system, AIDS, autoimmune diseases (e.g., rheumatoid arthritis), inflammation, allergies, cognitive disorders (e.g., Alzheimer's disease, Parkinson's disease), cognitive disorders, echizophrenia, asthma, skin disorders (e.g., pregnancy-related disorders, atherosclerosis, cardiovascular disorders, genically disorders, gastrointestinal disorders, proteins can also be used to aid wound healing and epithelial cell correction, to prevent skin aging due to sunburn, to mainteain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues, to identify their cognate ligands or binding partenin of the invention can be used as a food additive or primary tissues, to reservative to modify storage properties. Antibodies specific for a protein of the invention can be used in alleviating symptoms associated corrections. The protein sequence represents a human secreted protein-encoding cDNA of the invention.
                                                                                    र्
                                                                                                                                                                            밁
                                                                                                                                                                                                  र्
                                  र्
                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New nucleic acid molecules encoding 28 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions used as food additives or preservatives.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-NOV-1999; 99US-0163581P.
30-JUN-2000; 2000US-0215133P.
                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOV-2000; 2000WO-US030045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (HUMA-) HUMAN
                                                                                                                                                                                                                                 cal Similarity
            217
                                        181
                                                                  157
                                                                                             121
                                                                                                                       97
                                                                                                                                                 61
                                                                                                                                                                            37
                              CGGGCAAGGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA 240
                                                                                                                        AGCGTGGGAAGGAGCGGACCCTGCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                          AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                       AGGACCCGCGAGGAAGGGCCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                          2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Komatsoulis GA,
                                                                                                                                                                                                                                                                                       B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENOME SCI INC
                                                                                                                                                                                                                                                                                          673
                                                                                                                                                                                                                                              84.4%;
                                                                                                                                                                                                                                                                                          A.
                                                                                                                                                                                                                                                                                          562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Moore
                                                                                                                                                                                                                                 Score 1193.6; DB 4
Pred. No. 1.9e-285;
D; Mismatches 4;
                                                                                                                                                                                                                                                                                        ü
                                                                                                                                                                                                                                                                                          587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PA,
                                                                                                                                                                                                                                                                                          <u>ი</u>
                                                                                                                                                                                                                                                                                          625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Birse
                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                             DB 4; Length 2447;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  æ
                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                   4.
                                                                                                                                                                                                                                                                                          ₽,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŭ
                                                                                                                                                                                                                                                                                          0 Other;
                                                                                                                                                                                                                                   <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and
                                                                                                                        156
                                                                                                                                                  120
                                                                                                                                                                              96
                                                                   216
RESULT 11
AAD05334
ID AAD05
XX
AC AAD05
XX
AC AAD05
XX
DT 17-JU
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                         S
                                                                                                                                                                                            문
                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                             멼
                                                                                                                                                                                                                                                                                                                                                                                                                    밁
               17-JUL-2001
```

```
1057
                                                                                                                                                                                   997
                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                937
                                                                                                                                                                                                                                                                                                          877
                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                     817
                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                757
                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                 CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAATAA
                                                                             CCTGCTGATCCTGCTTCCTGCTCCTAGCCCTCTGCTCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                           CTCCAGTTCTGTCATCATCACCACCACCACCTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                      AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                            ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                             CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                       TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTTGGTGTAAAGATTTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACCCGAGGAACAACCTTAATGAAACTGAACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGTAAGTGA
                                                                                                                       CTCCAGTTCT
                                                                                                                                                                                                                                                                                                       CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGGTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                     TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1116
                                                                                                                                                      1080
                                                            1176
                                                                                          1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
   1236
                                                                                                                                                                                                                                                   996
                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                             936
                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                        876
                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                  816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     396
```

AADO5334 ID AADO5334 standard; cDNA; 2086 E XX AC AADO5334;

(first

```
AAD05300-AAD05379 represent cDNAs corresponding to 28 human secreted protein genes, and AAE01436-AAE01513 represent the proteins they encode. CC AAE01514-AAE01544 represent human secreted protein fragments or variants. CC The genes and their secreted proteins are useful for preventing. Treating cor ameliorating medical conditions, e.g., by protein or gene therapy. CC Pathological conditions can be diagnosed by determining the amount of the new genes. Specific uses are described for each of the 28 genes, the new genes. Specific uses are described for each of the 28 genes, cancer, tumours, foetal and developmental abnormalities, cancer, tumours, foetal and developmental abnormalities, conditive disorders, diseases of the immune system, AIDS, autoimmune cognitive disorders, schizophrenia, asthma, skin disorders (e.g., papriasis), sepsis, diabetes, atheroscierosis, cardiovascular disorders, cangiogenic disorders, kidney disorders, gastrointestinal disorders, cor proteins can also be used to aid wound healing and epithelial cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Parkinson's disease; cognitive disorder; schizophrenia; asthma; skin disorder; psoriasis; sepsis; diabetes; atherosclerosis; cardiovascular disorder; angiogenic disorder; kidney disorder; gastrointestinal disorder; pregnancy-related disorder; endocrine disorder; infection; wound healing; vulnerary; cell culture; chemotaxis; food additive; gene therapy; binding partner identification;
                                                                                                                                                                                                                                                                                                                                                                                          diagnosing, pused as food
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; secreted protein; proliferative disorder; cancer; tumour; foetal abnormality; developmental abnormality; haematopoietic disorder; immune system disorder; AIDS; autoimmune disease; rheumatoid arthritis; inflammation; allergy; neurological disorder; Alzhreimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-NOV-1999; 99US-0163581P.
30-JUN-2000; 2000US-0215133P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human secreted protein-encoding
                                                                                                                                                                                                                                                                                                                                                                                        New nucleic acid molecules encoding 28 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions used as food additives or preservatives.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-2000; 2000WO-US030045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAE01469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Komatsoulis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= b
247. .1374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /product= "Human secreted protein"
/transl except= (pos:688. .690, aa:Xaa)
/transl_except= (pos:1123. .1125, aa:Xaa)
/transl_except= (pos:1156. .1158, aa:Xaa)
/transl_except= (pos:1267. .1269, aa:Xaa)
/note= "Xaa_equals any of the twenty naturally ocurring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= c
/product=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Socation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                       562pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .246
g= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acids"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Mature human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Moore
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene 4 cDNA clone HWLFR02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Birse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Œ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ¥.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OBS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ΙD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NO:45
```

```
S
                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ភពពេលពេលពេលពង្គង
                                밁
                                                        8
                                                                                                          S
                                                                                                                                       밁
                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 1193; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues, to identify their cognate ligands or binding partners, and in chemotaxis, and can be used as a food additive or preservative to modify storage properties. Antibodies specific for a protein of the invention can be used in alleviating symptoms associated with the disorders mentioned above, and in disgnostic immunoassays e.g., radioimmunoassay or enzyme linked immunosorbent assay (ELISA). The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2086 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    present sequence represents a human secreted protein-encoding cDNA of the
                                                                                                                                                                                                                                                                                                         483
                                                                                                                                                                                                                                                                                                                                                                                                                  363
                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               183
                                                                                      723
                                                                                                                661
                                                                                                                                                                     601
                                                                                                                                                                                                 603
                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                             423
                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123
                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                   GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGGCAAGGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGGCAAGGGGACGCAGGGACGATGGGGGGTCCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                 GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                            TAGGTCTCGAGATCTTGGTGCAATTGKTTACTGTGTTGGTGGAAAGATTTCAATGAGAC
                                                                                                                                                        CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              544 A; 491 C; 538 G; 501 T; 0 U; 12 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       84.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 3.56
}; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1192.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .5e-285;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           302
           840
                                                                                        782
                                                                                                                                            722
                                                                                                                                                                      660
                                                                                                                                                                                                 662
                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                      602
                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                          542
                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                              482
                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                   422
                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   182
                                    842
                                                             780
                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
The present sequence is that of cDNA encoding a human anthrax toxin receptor (ATR). The cDNA, previously designated IMAGE CLONE 4563020, encodes a polypeptide that is identical to maino acids 1-317 of a ne identified ATR (see ABP54904), differing thereafter at the C-terminum that the control of the contro
                                                                                                              Novel isolated polypeptide useful for identifying agent that prevents or reduces effect of anthrax toxin on host cell, for treating human or non-human animal suffering from anthrax.
                                                                                                                                                                                                                                                                                                                           03-OCT-2001; 2001WO-US030941
                                                                                                                                                                                                                                                                                                                                                         13-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                     mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Anthrax; toxin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABV73883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABV73883
                                                                                                                                                                                                                             Young
                                                                                                                                                                                                                                                                                           05-DEC-2000; 2000US-0251481P
                                                                                                                                                                                                                                                                                                                                                                                           WO200246228-A2
                                                                                Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             963
                                                                                                                                                                                             2002-713235/77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                             ) WISCONSIN ALUMNI RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     anthrax
                                                                                                                                                                                                                             JAT,
                                                                                                                                                                              ABP54905.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    etandard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCCAGTTCTGTCATCATCACCACCACCACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCAGTTCTGTCATCACCACCACACACTGTTCTGACSGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGTAAGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cerecrearecrearecrecreceracecerecrecrecrecrecrecrecrecrecrecre
                                                                              Page 39-41; 45pp; English.
                                                                                                                                                                                                                            Bradley
                                                                                                             suffering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     receptor; human; antibacterial; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                      /product= "anthrax toxin receptor"
13. .193
/*tag= b
194. .1111
/*tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDNA;
                                                                                                                                                                                                                             ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2112
                                                                                                                                                                                                                             Collier RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₽P
                                                                                                                                                                                                                             Mogridge
   C-terminus.
                  of a newly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뮍
                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                    밁
                                           ð
                                                                                  밁
                                                                                                        S
                                                                                                                                      日
                                                                                                                                                                       Ş
                                                                                                                                                                                                              В
                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 1053; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2112 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                polypeptides, and
                                                                                                                  661
                                                                                                                                                  610
                                                                                                                                                                                601
                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                490
                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                              430
                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                            370
                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                     GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    573 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  as molecular probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 74.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  522 C; 515 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 1052.*;
Pred. No. 1.9e-
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4; DB 6;
```

```
function was previously known for this polypeptide, nor was there any prior indication that it is a complete or partial ATR. The invention provides ATR polypeptides and polypucleotides, host cells, vectors, and transgenic and knock-out animals. It also provides methods for identifying molecules that bind the ATR and which reduce the toxicity anthrax toxin. A claimed method for treating anthrax in a human or animals involves administering an agent that inhibits binding between anthrax toxin protective antigen (PA) and ATR at a level effective to reduce to severity of anthrax. Suitable agents include the 4563020 polypeptide of PA-binding fragment of it, a PA-binding polypeptide at least 80% identical to these, a fusion protein, a monoclonal or polyclonal antibody, a polysaccharide, a lipid or a nucleic acid. ATR polymentelections of ATR between the recombinant production of ATR and polyment of the recombinant production of ATR p
T; 0 U;
           0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vectors, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           animal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     မ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of.
```

6, Indels Length 0; Gaps

AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG 69 0

GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC ACCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG AGCGTGGGAAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG 240 189 180 129 120

GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC

CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT

489 480 429 420 369 360 309 300 249

600

549

660 609

GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA TGAATGACGGCTTTCA 780 729 720 669

Ş 밁 S 밁 á 밁 S 밁 Ş

```
ARASULT 13
ARA47455
ID ARA47
AC ARA47
A
Nucleic acids encoding TANGO polypeptides are useful as modulating agen for regulating callular processes like asthma, graft versus-host diseases, rheumatoid arthritis, psoriasis, inflammatory bowel disease, septic shock, ulcerative colitis, Crohn's disease, chronic myelogenous leukemia, cancer, liver disease, Hodgkin's disease, osteoarthritis,
                                                                                                                                                                      Novel nucleic acid sequences encoding TANGO-128, 140, 197, 212, 213, and 239 polypeptides useful for the treatment of asthma, rheumatoid arthritis, psoriasis and autoimmune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TANGO: 128; 140; 197; 212; 213; 224; 239; modulating agent; asthma; graft versus-host diseases; rheumatoid arthritis; psoriasis; inflammatory bowel disease; septic shock; ulcerative colitis; crohn's disease; chronic myelogenous leukemia; cancer; liver disease; hodgkin's disease; osteoarthritis; Lyme's disease; cachexia; autoimmune disease; myasthemia gravis; autoimmune disease; myasthemia gravis; autoimmune disease; prophylatic; therapeutic; human; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                     30-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human TANGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAA47455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200039284-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                          (MILL-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                                                  2000-465743/40.
DB; AAB01422.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    790
                                                                                                                                                                                                                                                                                                                                                                          MILLENNIUM
                                                                                                                              £ig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCCAGTTCTGTCATCATCACCACCACACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCAGTTCTGTCATCACCACCACACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           197 coding
                                                                                                                                4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first
                                                                                                                                                                                                                                                                                                                                                                                                                     98US-00223546
                                                                                                                                                                                                                                                                                                                                                                                                                                                               99WO-US031025
                                                                                                                                209pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
213. .1214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /product= "TANGO 197"
                                                                                                                                                                                                                                                                                                                                                                            PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  prognosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                             δ
                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                        유정
                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               성 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ភភភភភភភភភភភភ
                                                      S
                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 1053; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           lyme's disease, cachexia and autoimmune diseases e.g. myasthemia gravis, autoimmune diabetes and systemic lupus erythematosus. The nucleic acids are also useful for producing transgenic animals and the TANGO polypeptides themselves. Partial TANGO-128, 140, 197, 212, 213, 224, 239 sequences are useful in forensic biology, for diagnostic assays, pharmacogenomics and for monitoring clinical trials. TANGO polypeptides are suitable for both prophylactic and therapeutic methods for treating a subject at risk of a disorder or having a disorder associated with aberrant TANGO expression. A wide range of cellular disorders can be treated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                            650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           170
                           890
                                                                 781
                                                                                                                                                      721
                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         μ.
                                                                                                         TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                         CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGGCAAGGGGACGCAGGGAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2272
                                                 TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                              ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                               TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACCCGAGGAACAACCTTAATGAAACTGACAGAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                   ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                            AGCGTGGGAAGGAGCCCTGCTCTCCCCGGGCTGCGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 638 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        74.48;
99.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       554 C; 558 G; 522 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 1052.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2e-250;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
```

829

780

769 660 709 600 649

84C 889

949

540

589 480 529 420

469 360 409

349

240

180 229 120 169 60

```
ARESULT 14
AD100533
ID AD100
AC AD100
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                 ફ
                                                  Query Match
Best Local Sin
Matches 1053;
                                                                                                                                                                                                                                                                                                                     ameliorating domain (vWF) to the vWF.
                                                                                                                                             The invention relates to a novel fusion polypeptide comprising a von Willebrand factor A-like domain (vWF) amino acid sequence and an amino acid sequence heterologous to the vWF. The polypeptide of the invention demonstrates antibacterial activities whilst the composition and method may be useful in preventing or ameliorating the symptoms of cutaneous and/or inhalation anthrax. The current sequence is that of the human TANGO 197 cDNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      fusion; von Willebrand factor A-like domain; vWF; antibacterial; cutaneous; inhalation anthrax; human; TANGO 197; ss; gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rottman JB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ROTT/)
(OKEE/)
(OZKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-DEC-2001; 2001US-00038307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-JUL-2002; 2002US-00201292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2003144193-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADI00533;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADI00533
                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (HEAL/)
                                                                                                                                                                                                                                                                                                                                   TANGO 197 and/or TANGO 216 fusion polypeptides for preventing or liversing symptoms of anthrax comprises a von Willebrand factor A-like ain (vWF) amino acid sequence and an amino acid sequence heterologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1010
                                                                                                                                                                                                                                                                                                                                                                                                     2003-720708/68.
DB; ADI00534.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TANGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ROTTMAN J B.
O'KEEFE T L.
OZKAYNAK E.
HEALEY J J.
                   μ
                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                                                                  SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCCAGTTCTGTCATCACCACCACACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCCAGTTCTGTCATCATCACCACCACACACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                   2272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          197
                                                  74.4%;
llarity 99.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                       O'keefe
                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first
                                                                                                                  B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDNA
                                                                                                                                                                                                                                                                                    ő
                                                                                                                  638 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDNA; 2272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TL,
                                                                                                                                                                                                                                                                                  86pp;
                                                                                                                   554
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ozkaynak
                                                   0
                                                                                                                                                                                                                                                                                    English.
                                                  Score 1052.4; DB
Pred. No. 2e-250;
D; Mismatches
                                                                                                                  ü
                                                                                                                   558
                                                                                                                                                                                                                                                                                                                                                                                                                                                       'n
                                                                                                                  ຸດ
                                                                                                                  522
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Healey
                                                                                                                  H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1054
                                                                                    멂
                                                                                                                  0
                                                   1;
                                                                                  10;
                                                                                                                  ۲,
                                                                                                                   0
                                                                                  Length
                                                                                                                   Other,
                                                                                    2272;
                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1069
                    60
                                                   0
   RESULT 15
ADM64567
                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                     음 성
                                                                                                                         문
                                                                                                                                                         δ
                                                                                                                                                                                                 문
                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                     1070
                                                                                                                                                                                                     1010
                                                                                                                                                                    961
                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                     950
                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                      890
                                                                                                                                                                                                                                                                                                                                                                                                        830
                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                110
                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                   CTCCAGTTCTGTCATCATCACCACCACACACTGT 1054
                                                                                                                                                    AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                        ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                      CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                         TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                         GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACCCGAGGAACAACCTTAATGAAACTTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGTGGGAAGGAGCGGACCCTGCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                      CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                      TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                        GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                 ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGT
                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    169
                                                                                                                                                                                                        1069
                                                                                                                                                                                                                                                                          1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                          949
                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                          889
                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  289
```

```
Ś
                                                                                                                                  á
                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                  밁
                        S
                                                    밁
                                                                                                            밁
                                                                                                                                                                                             S
                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 1053; Conserv
                                                                                                                                                                                                                                                                                                             human von
TANGO197
                                                                                                                                                                                                                                                                                                                      The invention describes a fusion polypeptide comprising a von Willebrand factor A-like domain (vWF) amino acid sequence and an amino acid sequence heterologous to the vWF. Also described are: a method of preventing or ameliorating a symptom of anthrax in a subject thought to be at risk for exposure to or suspected of having been exposed to Bacillus anthracis; and a pharmaceutical composition comprising the novel fusion polypeptide. The composition and method are useful in preventing or ameliorating symptoms of cutaneous and/or inhalation anthrax. This sequence encodes human von Willebrand factor A-like domain (vWF) amino acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New TANGO 197 and/or TANGO 216 fusion polypeptides for preventing or ameliorating symptoms of anthrax comprises a von Willebrand factor A-like domain (VWF) amino acid sequence and an amino acid sequence heterologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antibacterial; gene therapy; von Willebrand factor A-like domain amino acid sequence; vWF amino acid sequence; anthrax; Bacillus anthracis; cutaneous anthrax; inhalation anthrax; human; TANGO197; gene; ss.
                                                                                                                                                                                                                                                                                 Sequence 2272 BP; 638 A; 554 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2003134786-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human von Willebrand factor A-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADM64567;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-DEC-2001; 2001US-00038307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADM64567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to the vWF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rottman JB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ROTT/)
(OKEE/)
(OZKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-DEC-2001; 2001US-00038307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (HEAL/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2003-829643/77.
DB; ADM64568.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens.
                          181
                                                      230
                                                                                121
                                                                                                              170
                                                                                                                                                                    110
290
                                                                                                                                     61
                                                                                                                                                                                               ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ROTTMAN J B.
O'KEEFE T L.
OZKAYNAK E.
HEALEY J J.
                                                                         GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard; cDNA; 2272
                 CGGGCAAGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                       GAGAGCCCT
                                                                                                              AGCGTGGGAAGGAACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                        AGCGTGGGAAGGAACCCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                      AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ
                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              O' keefe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ID NO 1; 64pp; English.
                                                   CGGCATCGGCTTCCAGTGGCTCTTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                      74.4%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ŢĽ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ozkaynak E,
                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                      Score 1052.4; DB Pred. No. 2e-250;
                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                 558 G; 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Healey JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein
                                                                                                                                                                                                                                                                                 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                     DB 11; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TANGO197
                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                      2272;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDNA
                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                          Gaps
349
                          240
                                                      289
                                                                                  180
                                                                                                              229
                                                                                                                                        120
                                                                                                                                                                      169
                                                                                                                                                                                                60
```

밁

ঠ

음 성 음

0 \	0 \	0 \	0 \	0 \	0 \		•	•		0 \		•	
1021 1130	961 1070	901	841 950	781 890	721 830	661 770	601 710	541 650	481 590	421 530	361 470	301 410	241 350
1 CTCCAGTTCTGTCATCATCACCACCACACACTGT 1054	1 AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT 10	1 ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT 96	1 CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC 90	TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT E	1 GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC 78	1 ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA 72	1 TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC 66	TGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGAG	1 GGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCCAGC	1 AGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATG	1 CACCCGAGGAACAACCTTAATGAAACTGACAGAGACAGAGACACAATCCGTCAAGGCCT 42	1 GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC 36	1 CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT 300 
	20 29	69	9	9 0	9 0	9 0	φ ο	9	φ 0	9 0	9 0	9 0	9 0

8 유

5 B

밁

5 8 5

Ś

B & B & B &

Search completed: December 17, 2005, 19:22:59
Job time : 947.731 secs

2 2 2 2 2 2 2

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
         22100
22100
22100
22100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
   1052 4
778.2
778.2
778.2
778.2
749.7
749.7
715.2
680.6
681.4
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
637.8
638.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
639.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nucleic search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-1
1414
1 aggacccgcgagga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IDENTITY_NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    December 18, 2005, 07:01:39 ; Search time 6389.95 Seconds (without alignments)
10353.271 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41078325 seqs, 23393541228 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST: *
      аддасссдсдаддвадддсс.....ававававававававава
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gb_est3:
gb_est4:
gb_est5:
gb_est5:
gb_est5:
gb_est6:
gb_gss17:
gb_gss17:
gb_gss2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gb_est1:*
gb_est2:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
      BB
                                  CR601167
AK0314274
AL542724
BM800898
BH823852
CX8724521
BG325444
BG325444
BG325444
BG325444
BG31305
CF126791
AK013005
CF132432
CF13243
CF1324
CF1324
CF1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82156650
CR601167 full-leng
AK031465 Mus muscu
AL542724 AL542724
BM800898 AGENCOURT
BI823853 603039031
CX872420 HESC4 68
C0245219 AGENCOURT
BG326444 6024025082
BG281561 602402412
AK013005 Mus muscu
CF126791 UI-HF-ET0
BE7132432 UI-HF-ET0
BE7132432 UI-HF-FQ0
BG281831 602403057
DN993680 TC113711
CN262102 170005326
BX364961 BX364961
CB990959 AGENCOURT
BX470942 DKF276861
BU131302 603117191
CD664532 92b4 IMR3
CF540285 UI-M-FO0-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1414
```

## CR601167 1957 å mRNA linear HTC 21-JUL-2004

ALIGNMENTS

2 (bases 1 to 1957)	REFERENCE
Faraday Avenue	
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600	
Contact : Feng Liang Email : fliang@lifetech.com URL :	REMARK
Unpublished	JOURNAL
Full-length cDNA libraries and normalization	TITLE
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.	AUTHORS
1 (bases 1 to 1957)	REFERENCE
Hominidae; Homo.	
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;	
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	
Homo sapiens	ORGANISM
Homo sapiens (human)	SOURCE
HTC; CNSLT_CDNA.	KEYWORDS
CR601167.1 GI:50481974	VERSION
CR601167	ACCESSION
of Homo sapiens (human).	
full-length cDNA clone CS0DI035YA13 of Placenta Cot 25-normalized	DEFINITION
CR601167 1957 bp mRNA linear HTC 21-JUL-200	Locus
	CR601167
	RESULT 1

Query Match Best Local : Matches 105	ORIGIN	FEATURES source	AUTHORS TITLE JOURNAL
74.4%; Similarity 99.9%; 3; Conservative	/organism="Homo sapiens" /mol_type="mRNA" /db xref="taxon:9606" /clone="CG80D1035YA13" /tlosue_type="placenta Cot 25-normalized" /plasmid="pCMVSPORT_6"	end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen.  Location/Qualifiers  11957	Genoscope.  Direct Submission  Submitted (20-JUL-2004) Genoscope - Centre National de Sequencage : Submitted (20-JUL-2004) Genoscope - Centre National de Sequencage : BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr)  - Web : www.genoscope.cns.fr)  1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime
74.4%; Score 1052.4; DB 4; Length 1957; 99.9%; Pred. No. 2.8e-245; ative 0; Mismatches 1; Indels 0;	"sapiens" 19606" 5YA13" lacenta Cot 1 PORT_6"	and cDNA was V sites of th was construct	Genoscope - ( - FRANCE (E-n s.fr) ed with a Not
DB 4; -245; 1;	25-nort	digest he pCM ed by	entre nail :
Length Indels	malized	ed with /SPORT 6 Life Tec	National segref@g
1957;		vecto:	de Sejenosco
)57; 0; Gaps		and clor r. Libraı gies, a	equencage ope.cns.f
0;		ry Ted	me r

á

밁 5 밁 á

á 밁 á

밁

Ş 밁 á 밁 S 밁 Ş

밁

δ

문 Ş 밁

S 용 ঠ 문

Research Group

in Riken

á

밁 δ 밁 δ 밁 ঠ 밁 Ś 밁

```
JOURNAL
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 2
AK031465
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
REFERENCE
AUTHORS
                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                 JOURNAL
                                                            Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs

Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs

AL Nature 420, 563-573 (2002)

4CE 6 (bases 1 to 3161)

NRS Adachi,J., Alzawa,K., Akimura,T., Arakawa,T., Bono,H., Carninci,P., Fukuda,S., Furuno,M., Hanagaki,T., Hara,A., Hashizume,W., Hayashida,K., Hayatsu,N., Hiramoto,K., Hiraoka,T., Hirozane,T., Hayashida,K., Hayatsu,N., Ishii,Y., Itoh,M., Kagawa,I., Kagukawa,T., Katoh,H., Kawai,J., Kojina,Y., Kondo,S., Komno,H., Kasukawa,T., Koyda,S., Kurihara,C., Matsuyama,T., Miyazaki,A., Murata,M., Nakamura,M., Nishi,K., Nomura,K., Numazaki,R., Ohno,M., Ohsato,N., Okazaki,Y., Saito,R., Saltoh,H., Sakai,C., Sakai,K., Sakazume,N., Sagabe,Y., Tagami,M., Tagawa,A., Shiragawa,A., Shiraraki,T., Sogabe,Y., Tanaka,T., Tomaru,A., Takahashi,F., Takaku-Akahira,S., Takeda,Y., Tanaka,T., Tomaru,A., Toya,T., Yasunishi,A., Muramatsu,M. and Hayashizaki,Y.

Birect Submission

NAL Direct Submission

NAL Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama, Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (8-mail:genome-resegsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kiteunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishina, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. RIKEN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer Genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 insert sequence.
AK031465
AK0314651 GI:26082340
HTC; CAP trapper.
Mus musculus (house mouse)
Mus musculus (house mouse)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AKO31465
AKO31465
Mus musculus 13 days embryo male testis cDNA, RIKEN full-length enriched library, clone:6030436P19 product:ANTEAX TOXIN RECEPTOR PRECURSOR (TUMOR ENDOTHELIAL MARKER 8) homolog [Mus musculus], fu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Carninci, P. and Hayashizaki, Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
cDNA library
Encyclopedia
                                                         URL:http://genome.gsc.riken.jp/,
Fax:81-45-503-9216)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The FANTOM Consortium and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Functional annotation of a Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FANTOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The RIKEN Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11042159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Consortium.
was prepared and sequenced in 
Project of Genome Exploration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Exploration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Research Group Phase II Team and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RIKEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mouse cDNA collection
                                  Mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Exploration Research
                                  Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   genes
```

```
밁
                                                                                                                                                                                   ş
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                     ંઇ
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
á
                             В
                                                         श
                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                 547
                                                                                                                                                                                                                                                                                                               487
                                                                                                                                                                                                                                                                                                                                             641
                                                                                                                                                                                                                                                                                                                                                                            427
                                                                                                                                                                                                                                                                                                                                                                                                           581
                                                                                                                                                                                                                                                                                                                                                                                                                                          367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                127
                                                                                                                                                                                      607
                                                                                                                                                                                                                                                                                  701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              935;
                                                                                                                        667
                                                                                                                                                         821
                                                                                                                                                                                                                    761
787
                               941
                                                            727
                                                                                             881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            prepare mouse tissues.
Please visit our web site for fur
URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genomic Sciences Center and Genome Science Laboratory in RIKEN.
Division of Experimental Animal Research in Riken contributed t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTGGACAAGTCAGGAAGTGTGCTGCACCACTGGAATGAAATCTACTTCGTGGAGCA
                                                                                                                                                                           TCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTGGCTCATAGATTCATCAGCCCACAGCTAAGGATGTCCTTCATTGTCTTCTCTACTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCACCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGGGGGCCGCCGAGGATGGGGGACCAGCTTGCTACGGAGGATTCGACCTCTACTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTGGGTGCGGGCCTGCGGGACTCTGCGTGCTCGTGCTCGTGCGCCGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTCGGCATCGGCTTCCAGTGGCTCTTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCA
                               CCAAGGCATTATCCACTCAATTTTAAAGAAATCCTGCATCGAAATTCTGGCGGCTGAACC
                                                                                                                                                                                                                    GACGGATGGGGAGCTGCACGAGGACCTCTTCTTCTACTCAGAGAGGGGAGGCTAACCGATC
                                                                                                                                                                                                                                         GACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAATAGGTC
                                                                                                                                                                                                                                                                                                    GCTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCACGAAGGATTCGAGAGGGCCAG
                                                                                                                                                                                                                                                                                                                                                                AGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGA
ATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACA
                                                    GCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACC
                                                                                             GGCTCGGATTGCAGACAGTAAGGACCACGTGTTTCCTGTGAACGACGGCTTCCAGGCTCT
                                                                                                                          GGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCT
                                                                                                                                                           CCGAGACCTTGGTGCGATTGT
                                                                                                                                                                                                                                                                                  TGAGCAGATTTACTATGAGAÁCAGTCAAGGATACAGGACGGCGAGCGTCATCATCGCGTT
                                                                                                                                                                                                                                                                                                                                                                                                            AGGGACAACTTTAATGAAACTAACTGAGGACAGGGAACAGATCCGACAAGGCCTAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="ANTRAX TOXIN RECEPTOR PRECURSOR (TUMOR ENDOTHELIAL
MARKER 8) homolog [Mus musculus] (SWISSPROT|Q9CZ52,
evidence: FASTY, 100%ID, 84.6%length, match=1428)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /tissue_type="testis"
/clone_lib="RIKEN full-length
/dev_stage="13 days embryo"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /db_xref="FANTOM_DB:6030436P19"
/db_xref="taxon:10090"
/clone="6030436P19"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /strain="C57BL/6J"
/db_xref="FANTOM_DI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60.4%;
87.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 _type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 853.4; DB 4;
Pred. No. 1e-196;
O; Mismatches 136;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              further details.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         enriched mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 3161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ដ
                                                                                                                                                                                                                                                                                                                                                                                                                                               426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  186
                                  1000
                                                                                                                                                                                          666
                                                                                                                                                                                                                                                      909
                                                                                                                                                                                                                                                                                   760
                                                                                                                                                                                                                                                                                                                 546
                                                                                                                                                                                                                                                                                                                                                700
                                                                                                                                                                                                                                                                                                                                                                                                              640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   400
                                                                                              940
                                                                                                                                                           880
                                                                                                                                                                                                                       820
                 ORIGIN
```

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
AL542724
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             몽
                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AL542724 Homo s
AL542724 Homo s
5-PRIME, mRNA s
AL542724
                                                                                                                                                                                                                                                                                                   Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
Email: seqref@genoscope.cns.fr. Web: www.genoscope.cns.fr
1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime
1st strand cDNA was primed with a NotI oligo(dT) primer. Five prime
1st strand cDNA was digested with Not I and cloned
into the Not I and EcoRV sites of the DCMVSPORT 6 vector. Library
was not normalized. Library was constructed by Life Technologies, a
division of Invitrogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         On Feb 15, 2001 this sequence version replaced gi:30548161 Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Li,W.B., Gruber,C., Jessee,J. and Full-length cDNA libraries and non Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bukaryola; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                         This sequence belongs to sequence cluster 1660.f for more information about this cluster, see for more information about this cluster, see http://www.genoscope.cns.fr/cdna?s=CSODEO11CF05QP1&c=1660.f. http://www.genoscope.cns.fr/cdna?s=CSODEO11CF05QP1&c=1660.f.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AL542724.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCCCGCAATGTGGACAGGGTCCTCTGCAGCTTCAAAATCAATGACTCAGTCACGCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTGATCAAGGAGGTCCCTCCACCCCTGTTGAGGAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATCCTGTTCCTGCTCCTAGCCCTGGCTCTCTGGTGGTTCTGGCCCCCTCTGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCTGTCATCACCACCACACACTGTTCAGACGGCTCCATCCTGGCGATTGCTCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCTGTCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTTGGCATGAAAGCTGCACTGCAGGTCAGCATGAACGACGGCCTGTCCTTCATCTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAGAAGCCCTTTGCTGTGGAAGACACTTATTTGCTGTGCCCAGCACCAATCTTGAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (bases 1 to 1006)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens (human)
                 Library was not normalized
                                                                                                                                                      /db_xref="taxon:9606"
                                                                                                                                                                                        organism="Homo sapiens"
                                                                                                                                  clone="CSODE011YL09"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:45718299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens PLACENTA Homo sequence.
                                                                                                                                                                        type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and Polayes,D. normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mkNA linear EST 24-MAR-2004
sapiens cDNA clone CS0DE011YL09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             906
                                           into
```

```
RESULT 4
BM800898
LOCUS
                            KEYWORDS
SOURCE
ORGANISM
                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                       ર્
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 804
                                                                                                                                                                                                                                               910
                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                     850
                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                               730
                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       252
                                                                                                                                                                                                                                                                                                                                                           790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            192
                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                804;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                        1054
AGENCOURT_6420797 NIH_MGC_72
5', mRNA sequence.
BM800898
BM800898.1 GI:19117721
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>ب</u>
           Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa;
 Eukaryota; Metazoa; Chordata; Craniata; Vertebro
Mammalia; Eutheria; Euarchontoglires; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGAGCCCTCGGCATCGGCTTCCCAGTGGCCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A--GTGGGAAGGGAGCCGGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCGTGGGAAGGGACCCTGCTCCCCGGGCCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGACCCGCGAGGAAGGGCCCGCGGAGGATCGCCGTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                         TGAACCATCCACCATATGTGCAGGAGAGTCATT
                                                                                                                                                                                                                                                                GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                     ACAGCTGGCCCGGATTGCCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                           TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                         TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTTGGTGTAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                               CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCA--
                                                                                                                                                                                                                                                                                                      ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                 GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           55.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 778.2; DB 1;
Pred. No. 1.8e-178;
1; Mismatches 4;
                                                                                                           Homo
                                                                                                           mRNA
sapiens
                                                                                                                                                                                            1000
                                                                                                                                                                                                                    813
               Vertebrata; Euteleostomi;
                                                                                                           linear | cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                           EST 05-MAR-2002
e IMAGE:5541228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.
                                                                                                                                                                                                                                                                                                      909
                                                                                                                                                                                                                                                                                                                                                           849
                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                 789
                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                       S
                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                           Ś
                                                                                              В
                                                                                                                       S
                                                                                                                                                  뫄
                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                 558
                                                                                                                                                    371
                                                                    498
                                                                                              431
                                                                                                                         438
                                                                                                                                                                                                                                                               251
                                                                                                                                                                                                                                                                                          258
                                                                                                                                                                                                                                                                                                                     191
                                                                                                                                                                                                                                                                                                                                             198
                                                                                                                                                                                                                                                                                                                                                                        131
                                                                                                                                                                                                                                                                                                                                                                                                  138
                                                                                                                                                                                                                                                                                                                                                                                                                                                       78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 1054)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC/DCTD/DTP
CDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
plate: LLAM12238 row: j column: 13
High quality sequence stop: 595.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGGAGAGCCGGAGAGCCCTCGGCATCG
                                                        ATTATGAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAG
                                                                                                                                                                                                                                                                                                                                GGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAAT
                                                                                                                                                                                                                                                                                                                                                                        GCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCA
                                                                                                                                                                                                                                                                                                                                                                                         GCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCA
                                                                                                                                                                                                                                                                                                                                                                                                                             ACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAAGAGCCCTCGGCATCG
AACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTG
                                                                                                           TTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTT
                                                                                                                                                    TAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAG
                                                                                                                                                                   TAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAG
                                                                                                                                                                                                                        AATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCACCCGAGGAACAACCT
                                                                                                                                                                                                                                                               CAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACA
                                                                                                                                                                                                                                                                                                                   GGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /tissue_type="melanotic melanoma"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NNH_MGC_72"
/note="Organ: skin; Vector: pCMV-SPORT6; Site_1: |
Site_2: Sall; Cloned unidirectionally. Primer: O
Average insert size 2 kb. Library constructed by
Technologies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5541228"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52.9%;
97.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ,
,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 748; DB 3;
Pred. No. 4.2e-171;
0; Mismatches 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1054;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        u
T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : NotI;
Oligo d
by Life
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Life
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          å,
                                                                                                                           497
                                                                                                                                                                               437
                                                                                                                                                                                                                                                                                          317
                                                                                                                                                                                                                                                                                                                     250
                                                                                                                                                                                                                                                                                                                                                                         190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ď
                 617
                                           550
                                                                     557
                                                                                                490
                                                                                                                                                                                                                                     377
                                                                                                                                                                                                                                                               310
                                                                                                                                                                                                                                                                                                                                               257
                                                                                                                                                                                                                                                                                                                                                                                                    197
```

8	Query Match Best Local S Matches 839	ORIGIN		Bourd	FEATURES			AUTHORS TITLE JOURNAL COMMENT	REFERENCE	VERSION KEYWORDS SOURCE ORGANISM	ACCESSION	RESULT 5 BI823853	B &	g Q	<b>Q</b> 0	B 8	8
48 GGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGG 107	y Match Local Similarity 95.4%; Score 740.6; DB 3; Length 878; Local Similarity 95.4%; Pred. No. 2.6e-169; hes 839; Conservative 0; Mismatches 29; Indels 11; Gaps 7;	male lung, age 27; and 1 male testis, age 69. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.8 kb, insert size range 1-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 021. Note: this is a NIH_MGC Library."	/Clone="IMAGE:51/99/4" /lab host="MIH10B" /clone_lib="NIH_MGC_115" /note="Organ: pooled brain, lung, testis; Vector: /note="Organ: pooled brain, lung, testis; Vector: /note="Organ: pooled brains, lung, testis; Vector: /note="Organ: pooled brains, lung, testis; Vector: /note="Organ: Not I still lung, testis; Vector: Not I still lung, testis; Vector: /note="Organ: Not I still lung, testis; Vector:	0	Plate: LLAMII High quality	DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov	Email: cgapbs-remail.nih.gov Tissue Procurement: Life Technologies, Inc. CDNA Library Preparation: Life Technologies, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)			EST. Homo sapiens (human) Homo sapiens	603039031F1 mRNA sequenc BI823853		797 TGTGCA-GGAGAGTCATTTCCAAGTTGTC 823	738 TCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCAT-a 796	678 CGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCA 737	618 GTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTG 677	551 AACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAATAAGTCTCGAGATCTTG 610
REFERENCE	SOURCE ORGANISM	RESULT 6 CX872420 LOCUS DEFINITION ACCESSION VERSION KEYMORDS			Q	р Q	Db 4d	A 4d	Qy 5	Qy Db	Qy 4	Qy 3	Qy Db	Qy 2	Qy 1	Оу Db	da
9	Homo sapi Homo sapi Eukaryota	CX872420  744 bp mRNA linear EST 03-FEB-2005 HESC4_68_H01.gl_A037 NIH_MGC_262 Homo sapiens cDNA clone IMAGE:7487092 57, mRNA sequence. CX872420 CX872420 CX872420.1 GI:58555594 EST_	TTCAAGATCAATGACTCGGTCACACTCAATGAAAGCC 916	TGAGAGGA-AAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGC TGAGAGGACGAGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGC TGAGAGGAACGAACGTGGAACATGCAACGTGGAACCAGGGTCCTCTTGCAAGGT		08 ATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTG-AAGAAGTCCTGCATC 766	648 ATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGA 707	88 AGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGTGTAAAAG 647	28 CCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAG 587	168 AAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAG 527	08 TCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATG	407	88 TCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCT 347	28 GATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAA 287 	68 TGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCG 227	08 CCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGG 167	

```
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                               á
                                                                                                                                                                밁
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                        á
                                                                    밁
                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                      268
                                                                                                             241
                                                                                                                                                                208
                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                          148
                                                                                                                                                                                                                                                                                                         121
                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tch 50.7%; Sc
al Similarity 100.0%; P
717; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                       88 AGCGTGGGAAGGAGCCGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                                                                                                                                                   28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Office of Cancer Genomics / NIH
National Cancer Institute / NIH
Bldg. 31 Rml0A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: BresaGen, Inc.
cDNA Library Preparation: Express Genomics, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Laboratory for Genomics and Bioinformatics,
University of Georgia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.lnl.gov
plate: LLAM15815 row: p column: 02
Seq primer: JENREW (CAGGARACACCTATGACC)
High quality sequence stop: 744.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (1999)
Contact: Daniela S. Gerhard, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                     GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                           CGGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                             GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                 CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCAGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                    AGCGTGGGAAGGGAGCCGGACCCTGCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                CGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                         CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /cell line="BG01"
/cell line="BG01"
/lab host="DH10B-T1 phage-resistant E. coli"
/lab host="DH10B-T1 phage-resistant E. coli"
/clone lib="NIH MGC 262"
/note="Vector: pExpress-1; Site 1: Not1; Site 2: EcoRV;
/note="Vector: pExpress-1; Site 1: Red embryos and differentiated to an early neural progenitor cell type.
Cell line id and NIH Registry designation is EGO1.
Positive for Nestin and Musashi expression. Passage number 18. cDNA primed using oligo-dT primer:
5'-pGACTAGTTCTAGATCGCGCGCGCGCCC(7) 25-3' and cloned into the EcoRV/Not1 sites of pExpress-1. This primary library is non-normalized (normalized primary library is non-normalized (normalized primary library is NIH MGC 259). It was constructed by Express Genomics (Frederick, MD). Sequence ends have been trimmed to exclude vector and regions below Phred quality 16. Note: this is a Mammalian Gene Collection library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:7487092"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tissue_type="embryonic stem"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 717; DB 8; L; Pred. No. 1.4e-163; 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 744;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                       147
                          360
                                                                                                                    300
                                                                                                                                                                   267
                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                             207
                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                   87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                328
```

				-		
FEATURES BOUTCE	RESULT 7 CO245219 LOCUS DEFINITION ACCESSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE JOURNAL COMMENT	Db 6	Q B Q			OV 3
	CO245219 AGENCOURT 26524177 NIH MGC 212 Homo sapiens cDNA clone IMAGE:30924322 5', mRNA sequence. CO245219 CO245219.1 GI:49108057 EST. Homo sapiens (human)	628 TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC 687 661 ACAGCTGGCCCGGATTGCGACACAGAAGGATCATGTGTTTCCCGTGAAAGATTTCAATGAGAC 687	541 TGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTCTATTCAGAGAGGGAGG	GGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCCAGC		28 61

```
RESULT 8
BG326444
LOCUS
             ACCESSION
VERSION
                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                 5
                                                                                                                                                                              밁
                                                                                                                                                                                                                                                  ક
                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                  DEFINITION
 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                             586
                                                                                                                                                                                                                                                                                                                                                                                        462
                                                                                                                                                                                                                                                                                                                                                                                                                466
                                                                                                                                                                                                                                                                                                                                                                                                                                           402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               106
                                                                                                                                                                                                                                642
                                                                                                                                                                                                                                                          646
                                                                                                                                                                                                                                                                                   582
                                                                                                                                                                                                                                                                                                                                      522
                                                                                                                                                                                                                                                                                                                                                                526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         226
                                                                                                                                                                                                        706
                                                                                                                               762
                                                                                                                                                    766
                                                                                                                                                                               702
BG326444 963
602425082F1 NIH_MGC_14 Homo 6
mRNA sequence.
BG326444
BG326444.1 GI:13132881
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          746;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGATGGGGGTCCAGCCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGGCCAT
                                                                                                                                                                                              GAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCAT 765
                                                                                                                                                                                                                                                                                                  AGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTTGGTGTGAA 645
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCA 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAAGACAGAGAAACA 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTC 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGA 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCCACGGCGGAGGGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGGCGAGTTCGCGGAGCGTGGGAAGGAAGCGACCCTGCTCCCCGGGCTGCGGGCCAT
                                                                                                                                           CGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA
                                                                                                                                                                               GAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCCCACTCATTTTGAAGAAAGTCTGCAT
                                                                                                                                                                                                                                               AGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGT
                                                                                                                                                                                                                                                                                                                                                    AGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTC
                                                                                                                                                                                                                                                                                                                                                                                          TGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                        TGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                         AATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGAGACACTTACATGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTTATTGTTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGA
                                                                                                                                                                                                                                   AGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGT
                                                                                                                                                                                                                                                                                     AGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGAA
                                                                                                                                                                                                                                                                                                                                      AGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    primer containing a Not I site. Double strand cDNA was size selected according to mRNA size fraction, ligated with EcoR I adaptor, digested with Not I and then cloned directionally into pXX-Asc vector. The library tag sequence located between the Not I site and the polyA tail is GATAAGGCCA. Tissue was provided by Mary Hendrix."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      50.6%;
97.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 715.2; DB 7;
Pred. No. 4e-163;
0; Mismatches 13;
                                                                 963
                                                  sapiens
                                                                ğ
                                                                 mRNA
                                                 nRNA linear EST 27-FEB-2001 CDNA clone IMAGE:4563020 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                        807
                                                                                                                                800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ω
T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                        581
                                                                                                                                                                                                                                                                                                                                                                 585
                                                                                                                                                                                                                                                                                                                                                                                          521
                                                                                                                                                                                                                                                                                                                                                                                                                 525
                                                                                                                                                                                                                                                                                                                                                                                                                                            461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 105
                                                                                                                                                                                                                                    701
                                                                                                                                                                                                                                                                                      641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
ORGANISM
                                        밁
                                                            Ş
                                                                                           밁
                                                                                                            ð
                                                                                                                                           밁
                                                                                                                                                                   Ś
                                                                                                                                                                                            밁
                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                       Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                421
                                                                                           311
                                                                                                                                                                                               191
                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                 131
                                         371
                                                                 361
                                                                                                                 301
                                                                                                                                            251
                                                                                                                                                                    241
                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                   71
                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                     11
```

```
1 (bases 1 to 963)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (IDNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution informatic found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: LLCM1276 row: C column: 21 High quality sequence stop: 718.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                    CGGGCAAGGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGACCCGCGAGGAAGGCCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                           GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                               CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                   CACCCGAGGAACAACCTTAATGAAACTGACAGAGAACAGAGACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                          CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                               CGGGCAAGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone="IMAGE:4563020"
/tissue_type="renal cell adenocarcinoma"
/lab_host="DH10B (phage-resistant)"
/clone lib="NIH MGC_14"
/clone lib="NIH MGC_14"
/clone lib="NIH MGC_14"
/cloned into EcoRI/XhoI sites using the following 5'
adaptor: GGCACGAG(G). Size-selected >500bp for average
insert size 1.8kb. Library constructed by Ling Hong in
the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZAP-cDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               48.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 688;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .8e-156;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          963;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                               420
                                                                                                                                                          370
                                                                                                                                                                                                  360
                                                                                                                                                                                                                                          310
                                                                                                                                                                                                                                                                                                                                  250
                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                     190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               70
                             480
                                                                       430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N
```

```
REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 9
BG281561
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
              Query Match
Best Local S
Matches 786
                                                                                                                                                                                                                                                                                                                    воигсе
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         727
                                                                                                                                                                                                                                                                                                                                             Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC/DCTD/DTP
CDNA Library Preparation: Ling Hong/Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov
Plate: LLCM1228 row: h column: 04
High quality sequence stop: 815.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BG281561
BG281561.1 GI:13030486
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BG281561 820 bp mRNA linear EST 21-FI
602402412F1 NIH_MGC_20 Homo sapiens CDNA clone IMAGE:4544691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hominidae; Homo.
1 (bases 1 to 820)
                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCTCTGCAAGGCATCATCCACTCAATT 748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGATCTGGAAGGCATCATCCATTCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGTTTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  веquence.
               Conservative
                                                                                  /lab_host="DH10B (phage resistant)"
/clone lib="NIH MGC 20"
/clone lib="NIH MGC 20"
/note="Organ: skin; Vector: pOTB7; Site 1: XhoI; Site 2:
ECORI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5: adaptor: GGCNGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                          tissue_type="melanotic melanoma"
                                                                                                                                                                                                                                                          clone="IMAGE: 4544691"
                                                                                                                                                                                                                                                                                                                     .820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   --GGATGCGGACAGTAAGGATCATGTGTATCCCGTGAATGACGG--TTTA
                             48.5%;
               0;
              Score 685.6; DB 2;
Pred. No. 6.5e-156;
0; Mismatches 19;
                                           <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gene
                                           Length
               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Collection
                                             820;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST 21-FEB-2001
3:4544691 5',
               9
               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                              RESULT 10
AK013005
LOCUS
                                                            SOURCE
ORGANISM
                                                                                                       ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
   REFERENCE
                                                                                          KEYWORDS
                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   369
                                                                                                                                                                                                                                                                         787
                                                                                                                                                                                                                                                                                                                                     729
                                                                                                                                                                                                                                                                                                                                                                 715
                                                                                                                                                                                                                                                                                                                                                                                               669
                                                                                                                                                                                                                                                                                                                                                                                                                            656
                                                                                                                                                                                                                                                                                                                                                                                                                                                          609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ø
                                                                                                                                               AK013005

AK013005

Mus musculus 10, 11 days embryo whole body cDNA, RIKEN full-length enriched library, clone:2810405N18 product:ANTRAX TOXIN RECEPTOR PRECUESOR (TUMOR ENDOTHELIAL MARKER 8) homolog [Mus musculus], full
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muridae; Murinae; Mus.
1
                                                           Mus musculus (house mouse)
                                                                                       HTC; CAP trapper.
                                                                                                       AK013005
AK013005.1
                                                                                                                                    insert sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAGCCCTCGGCATCGGCTTCCAGTGGCCTCTTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                              AGCAGCTGAACCATCCACCATATGTGCAGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                              GAGACACAGCTGGCCCGGATTGCGGACAGT-AAGGATCATGTGTTTTCCCGTGAATGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAACAGTT-GGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCT--TTATTGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACCGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                         AGCAGCTGAACCATACA-CATATGTGCAGGACAG
                                                                                                                                                                                                                                                                                                                                                      CTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCT
                                                                                                                                                                                                                                                                                                                                                                                               GAGACACAGCTGGCCCGGATTGCGGACAGTAAAGGATCATGTGTTTCCCCGTGAATGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGATGGTGTGAACAGATTTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAA-AGATTTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGGGCCAGTGAGCAGATTTATT-ATGAAAACAGACAAGGGTACAGGACAGCCAGCGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCCACCCGAGGAACAAGCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAACAGTTGGGTTCACAATTTCATCAGCCCACAGTTGAAAATGTCCTTATATGTGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCCACTGGAATGAAATCTATTACTTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGGGCAAGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCGTGGGAAGGGAGCGGACCCTGCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                     -TTTCAGGCTCTGC-AGGCATCATCCATCAAATCTTGACGAAGTCCTGCCTCGAAATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GI:12850099
                                                                                                                                                                                                                                                                         819
                                                                                                                                                                                                                                                                                                       808
                                              Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                728
                                                                                                                                                                                                                                                                                                                                                                                                                              714
                                                                                                                                                                                                                                                                                                                                                                                                                                                          899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                      786
                                                                                                                                                                                                                                                                                                                                                                  774
```

```
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Adachi, J., Aizawa, K., Akahira, S., Akimura, T., Arai, A., Aono, H., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Fukunishi, Y., Furuno, M., Hanagaki, T., Hara, A., Hayatsu, N., Hiramoto, K., Hiramoto, K., India, F., Imotani, K., Ishii, Y., Itoh, M., Izawa, M., Kasukawa, T., Kato, H., Kawai, J., Kojima, Y., Konno, H., Kouda, M., Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, A., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Okazaki, Y., Konno, H., Sasaki, D., Saito, H., Saito, R., Sakai, C., Sakai, K., Sano, H., Sasaki, D., Shibata, K., Shibata, Y., Shinagawa, A., Shiraki, T., Sogabe, Y., Suzuki, H., Tagami, M., Tagawa, A., Shiraki, T., Sogabe, Y., Suzuki, H., Tagami, M., Tagawa, A., Takahashi, F., Tanaka, T., Yoshina, Y., Toya, T., Yamamura, T., Yasunishi, A., Yoshida, K., Yoshina, Y., Toya, T., Yamamura, T., Yasunishi, A., Yoshida, K., Yoshina, Y., Toya, T., Yamamura, T., Yasunishi, A., Yoshida, K., Yoshina, Y., Toya, T., Yamamura, T., Yasunishi, A., Yoshida, K., Yoshina, Y., Toya, T., Yamamura, T., Yasunishi, A., Yoshida, K., Yoshina, Y., Toya, T., Yamamura, T., Yasunishi, A., Yoshida, K., Yoshina, Y., Toya, T., Yamamura, T., Yasunishi, A., Yoshida, K., Yoshina, Y., Toya, T., Yamamura, T., Yasunishi, A., Yoshida, K., Yoshina, Y., Toya, T., Yamamura, T., Yasunishi, A., Yoshida, K., Yoshina, Y., Yoshina, Y., Yasunishi, A., Yoshida, K., Yoshida, K., Yoshida, K., Yoshina, Y., Yasunishi, A., Yoshida, K., Yoshida, K., Yoshida, Y., Yasunishi, A., Yoshida, K., Yoshida, Y., Yasunishi, A., Yoshida, Y., Yasunishi, Y., Yasunishi, Y., Yasunishi, Y., Yasunishi, Y., Yasunishi, Y., Ya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A., and Hayashizaki, Y. RIKEN integrated sequence analysis (RISA) system -384-format sequencing pipeline with 384 multicapillary sequencer Genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                                                 CDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN.

Division of Experimental Animal Research in Riken contributed to prepare mouse tissues. First strand cDNA was primed with a primer [5' GAGAGAGAGAGAGCTCTTTTTTTTTTTTTTTTTVN 3'], CDNA was prepared by using trehalose thermo-activated reverse transcriptase and subsequently enriched for full-length by cap-trapper. cDNA went through one round of normalization to Rot = 7.5 and subtraction to Rot = 37.5. Second strand cDNA was prepared with the primer adapter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh,M., Konno,H., Okazaki,Y., Muzamatsu,M. and Hayashizaki,Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FANTOM Consortium.
Functional annotation of a full-length mouse cDNA collection Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nature 420, 563-573 (2002) 6 (bases 1 to 1614)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The FANTOM Consortium and the RIKEN Genome Exploration Research Group Phase I & II Team.
Group Phase I & II Team.
Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The RIKEN Genome Exploration Research Group Phase II Team and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carninci, P. and Hayashizaki, Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
                                                                                               11042159
Location/Qualifiers
1. .1614
                                                                                     Cloning sites,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               genes
                                                          망
                                                                                                                           8
                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    431
                                                                                                                                 851
                                                                                                                                                                                                      422
                                                                                                                                                                                                                                                                                                                                 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122
                                                             482
                                                                                                                                                                                                                                                                791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    736;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N
   AAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTT
```

```
local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       371 ACAACCTTAATGAAACTGACAGAAGACAGAGACAAATCCGTCAAGGCCTAGAAGAACTC 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAGCTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCACGAAGGATTCGAGAGGGCCAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAACTTTAATGAAACTAACTGAGGACAGGGAACAGATCCGACAAGGCCTAGAAGAGCTC
                                                                                                                                                                                                                                                                   GGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCC
                                                                                                                                                                                                                                                                                                                                                                     CGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                          GACCTTGGTGCGATTGTTTACTGCGTTGGCGTGAAGGATTTCAATGAAACTCAGTTGGCT 301
                                                                                                                                                                         ACCATATGTGCAGGAGGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGATTTACTATGAGAACAGTCAAGGATACAGGACGGCGAGCGTCATCATCGCGTTGACG
                                                                                       CGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAG 910
                                                                                                                                        ACCATCTGCGCGGGAGAGTCCTTTCAAGTGGTCGTAAGAGGAAATGGCTTCCGACATGCC
                                                                                                                                                                                                                                         GGCATTATCCACTCAATTTTAAAGAAATCCTGCATCGAAATTCTGGCGGCTGAACCATCC
                                                                                                                                                                                                                                                                                                                                        CGGATTGCAGACAGTAAGGACCACGTGTTTCCTGTGAACGACGGCTTCCAGGCTCTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /proteTn_id="BAB28591.1"
/db_xref="GI:12850100"
/db_xref="GI:12850100"
/tamel="dI:12850100"
/tamel="dI:128DREQIROGLEELQKVLPGGDTYMHEGFERASEQIYYENS
/tamelation="WKLTEDREQIROGLEELQKVLPGGDTYMHEGFERASEQIYYENS
GGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADS
KDHVEPVNDGFQALQGIIHSIIKKSCLEILAAEPSTICAGESFQVVVRGNGFRHARNV
DRVLCGSFKINDSVTLAKEFPAVEDTYLLCFAFILKEVGMKAALQVSNNDGLSFISSSV
IITTTHCSDGSILAIALLVLFLLLALALLWMFWPLCCTVIIKEVPPPPVBESBEEEDDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="unnamed protein product; ANTRAX PRECURSOR (TUMOR ENDOTHELIAL MARKER 8) musculus] (SWISSPROT 09CZ52, evidence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GLPKKKWPTVDASYYGGRGVGGIKRMEVRWGEKGSTBEGAKLEKAKNARVKMPEQEYE
FPEPRNLNNNMRRPSSPRKWYSPIKGKLDALWVLLRKGYDRVSVMRPQPGDTRFRGWR
LTICLGSKHVHPGRHDKGPETPLLKQAWMFSSFLERAFQ"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84.6%length, match=1428)
putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /dev_stage="10, 11 days embryo"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue_type="whole body"
/clone_lib="RIKEN full-length enriched
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="mRNA"
/strain="C57BL/6J"
/db_xref="FANTOM_DB:2810405N18"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     clone="2810405N18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               48.2%;
89.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 681.4; DB Pred. No. 8e-155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1614;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           homolog
FASTY, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOXIN RECEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                              730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
970
                                                                                                                                               481
                                                                                                                                                                                              850
                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                             790
                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             670
```

```
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
CF126791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tel: 319 335 8250
Fax: 319 335 9565
Email: bento
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CF126791 780 bp mRNA 1
UI-HF-ET0-avv-o-15-0-UI.r1 NIH MGC 214 Homo
IMAGE:30560510 5', mRNA sequence.
CF126791 CF126791.1 GI:33204381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tissue Procurement: Mary Hendrix CDNA Library preparation: Dr. M. Bento Soares, University of CDNA Library Arrayed by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr. M. Bento Soares, University of IDNA Sequencing by: Dr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hominidae; Homo.

1 (bases 1 to 780)

1 sonaldo, M.F., Lennon, G. and Soares, M.B.

Normalization and subtraction: two appr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Coordinated Laboratory for Computational Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        http://genome.uiowa.edu/distribution/humanfl.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8889548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGTTCCTGCTCCTAGCCCTGGCTCTCCTCGTGGTTCTGGCCCCCTCTGCTGCACTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCCCTTTGCTGTGGAAGACACTTATTTGCTGTGCCCAGCACCAATCTTGAAAGAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCATCAAGGAGGTCCCTCCACCCCCTGTTGAGGAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCATCATCACCACCACACACTGTTCAGACGGCTCCATCCTGGCGATTGCTCTGCTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCATGAAAGCTGCACTGCAGGTCAGCATGAACGACGGCCTGTCCTTCATCTCCAGTTCT
/clone="IMAGE:30560510"
/tissue_type="Chondrosarcoma Lung Metastasis cell lines"
/tissue_type="Chondrosarcoma Lung Metastasis cell lines"
/lab_host="MIDIB (TI phage resistant)"
/clone_lib="MIH_MGC_214"
/clone_lib="MIH_MGC_214"
/note="Gorgan: Lung; Vector: pyx-Asc; Site_1: EcoR I;
/inte="Gorgan: Lung; Vector: pyx-Asc; Site_1: EcoR I;
/inte="Gorgan: Lung; Vector: pyx-Asc; Site_1: EcoR I;
/inte="Gorgan: Lung; Vector: pyx-Asc; Genome Research, 6:791-806;
1996. Denatured RNA was size fractionated on a 1% agarose
gel. First strand cDNA synthesis was primed with oligo-dT
primer containing a Not I site. Double strand cDNA was
size selected according to mRNA size fraction, ligated
with EcoR I adaptor, digested with Not I and then cloned
directionally into pyx-Asc vector. The library tag
sequence located between the Not I site and the polyA tail
is GATAAGGCCA. Tissue was provided by Mary Hendrix."
                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pyx-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               approaches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IA 52242,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            University of Iowa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  facilitate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST 05-AUG-2003
cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 12
BE741333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         묽
                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 645; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                           Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                               mRNA sequence.
BE741333
                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                         BE741333.1
                                     cDNA Library Preparation:
             cDNA Library Arrayed by: The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                      GI:10155325
                                                                                                                                                                                                                                                                                                                                                      (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  45.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>.</u>
             Ling Hong/Rubin Laboratory
The I.M.A.G.E. Consortium (LLNL)
```

```
AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCGTGGGAAGGAGCGGACCCTGCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                     CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                          GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
TATGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGGAAA
                 TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAA 646
                                                                                       GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGGGCAAGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCCTGCGGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 644.4; DB 6;
Pred. No. 7.2e-146;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                           600
                                                                                                                                                                                   540
                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                554
                                                                                                                                                                                                                                                                                                                                                                            494
                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                          734
                                                                                                                                                674
                                                                                                                                                                                                                          614
                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       194
```

1 (bases 1 to 725)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999) 601594179F1 NIH\_MGC\_9 Homo sapiens cDNA clone IMAGE:3948114 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo. Contact: Robert Strausberg, Ph.D. ď Gene linear Collection (MGC) EST 15-SEP-2000

FEATURES

воитсе

ORIGIN

facilitate

gene

USA

of Iowa

395

-

455

61

515

EST 05-AUG-2003 CDNA clone

```
Matches 653;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.
Plate: LLCM810 row: n column: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGAC 454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAG 754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAA 514
                                                                                                                                                                                                    TATTTACTGTGTCCAGCGCCTATCTTAA-AAGAAGTTGGCATGAAAGCTGCACTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                              CAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGC 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTT 814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTGGTGTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCAT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTTGGTGTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTTTCTATTCAGAGAGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTC
                                                        CAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCAGCAACACTTG
                                                                                            CAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACCACACACTG 1053
                                                                                                                                                                  TATTTACTGTGTGCAGCGCCTATCTTAACAAGAAGTTGGCATGAAAGCTGCACTCCAGGT
                                                                                                                                                                                                                                                                          AGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACT
                                                                                                                                                                                                                                                                                                                                                                               CAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTT
                                                                                                                                                                                                                                                                                                                             AGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACT 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             quality sequence stop: 711.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="adenocarcinoma cell line"
/lab host="DH10B (phage-resistant)"
/lab host="DH10B (phage-resistant)"
/clone lib="NH MGC_9"
/clone lib="NH MGC_9"
/note="Organ: ovary; Vector: pOTB7; Site_1: XhoI; Site_2:
/notes="Organ: ovary; Vector: poTB7; Site_1: XhoI; Site_2:
/cloned into EcoRI/XhoI sites using the following 5'
adaptor: GCCACGAG(G). Size-selected >500bp for average
insert size 1.8kb. Library constructed by Ling Hong in
the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZAP-CDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            clone="IMAGE:3948114"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45.1%;
98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 637.8; DB 2;
Pred. No. 2.9e-144;
0; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       574
                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     694
                                                          660
                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
CF132432
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                              S
                                                                                    片
                                                                                                                                 á
                                                                                                                                                                                              밁
                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 641; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661 T
                                 146
                                                                                    61
                                                                                                                                                                                                                                                 26
                                                                                                                                         86
                                                                                                                                                                                              ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 641)
Bonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CF132432
CF132432.1 GI:33215693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CF132432 641 bp mRNA
UI-HF-FQ0-awo-m-16-0-UI.r1 NIH_MGC_215
IMAGE:30560079 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: bento-soares@uiowa.edu
Tissus Procurement: Mary Hendrix
CDNA Library preparation: Dr. M. Bento Soares, University of CDNA Library Arrayed by: Dr. M. Bento Soares, University of I DNA Sequencing by: Dr. M. Bento Soares, University of Iowa Clone Distribution: Distribution information can be found at http://genome.uiowa.edu/distribution/humanfl.html
Seq primer: pXX-5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fax:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            University of Iowa 375 Newton Road ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Coordinated Laboratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Soares, MB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8889548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hominidae; Homo.
TGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGAGGCACGCAGGGAGGAT
                                                                                                                                                                                                                                      ATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCCTGCT
                                                                                       CTCCCCGGGCTGCGGCCATGGCCACGGCGAGCGGAGAGCCCCTCGGCATCGGCTTCCAG
                                                                                                                     CTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGGGGGAGAGCCCTCGGCATCGGCTTCCAG 145
                                                                                                                                                                                                 ATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                U: 319 335 8250
B: 319 335 9565
Cl: bento
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="Chondrosarcoma Lung Metastasis cell lines"
/lab host="DH108 (T1 phage resistant)"
/clome lib="NIH_MGC_215"
/clome lib-"NIH_MGC_215"
/clome lib-"NIH_MGC_215"
/note="Organ: Lung; Vector: pYX-Asc; Site 1: EcoR I;
/note="Organ: Lung; Vector: pYX-Asc; Senome Research, 6:791-806,
196. Denatured RNA was size fractionated on a 1% agarose
gel. First strand cDNA synthesis was primed with oligo-dT
primer containing a Not I site. Double strand cDNA was
size selected according to mRNA size fraction, ligated
with EcoR I adaptor, digested with Not I and then cloned
directionally into pYX-Asc vector. The library tag
sequence located between the Not I site and the polyA tail
is GATAAGGCCA. Tissue was provided by Mary Hendrix."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone="IMAGE:30560079"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                             44.6%;
99.8%;
                                                                                                                                                                                                                                                                                                   Score 630; DB 6; I
Pred. No. 2.2e-142;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for Computational
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEBRF, Iowa City,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                         Length 641;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IA 52242,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
```

ઇ

문 ঠ

361

В á 밁

481 875 421 815

Gaps

120

60

ð 밁 ঠ В र्

1054

601 994 541 935 밁 र् 밁 ક 밁 ঠ 밁 ક 밁 ş 밁 δ

301 695 241 635 181 575 121

```
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
BG281831
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                       Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA sequence.
BG281831
BG281831.1 GI:1
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                               CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: image.llnl. Plate: LLCM1230 row: a column: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hominidae; Homo.

1 (bases 1 to 964)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BG281831
602403057F1 NIH_MGC_20 Homo
                                                                                                                                                                                                                                                                                                                                                                                                   Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC/DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGACAGAAGACAGAGAACCAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAGATCTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAGGAGACACTTACATGCATGAAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGCTGCACCACCTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTTACTGTGTGGTGAAAGA-TTCAATGAGACACAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACAGACAAGGGTACAGGACAGCCAGCCATCATTGCTTTGACTGATGGAGAACTCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGACAGAAGACAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA
                                                                                                                                                                                                                                             quality sequence stop: 659.
/organism="Homo sapiens"
/mol type="mRNA"
/mol type="mRNA"
/db_xref="taxon:9606"
/clome="IMAGE:4545302"
/tissue_type="melanotic melanoma"
/lab_host="DH10B (phage-resistant)"
/clome lib="NIH MGC_20"
/clome lib="NIH MGC_20"
/corne lib="NIH MGC_20"

                                                                                                                                                                                                                             ocation/Qualifiers
                                                                                                                                                                                                       .964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:13030757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64 bp m
sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mRNA linear EST 21-FEB-2001 s cDNA clone IMAGE:4545302 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MGC)
                                                                                                                                                                                                                                                                                          . gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                        RESULT 15
DN993680
LOCUS
                                                                                                                                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                         5
         REFERENCE
                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 641; Conser
                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        382
                                                                                                                                                                                                                                                                                                                                                                                                                                              595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            142
                                                                                                                                                                                                                                                                                                                                                                                                       622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22
                                                                                                                                                                                                                         DN993680 672 bp mRNA linear EST 17-MAY--
TC113711 Human adult whole brain, large insert, pCMV expression
library Homo sapiens cDNA clone TC113711 5' similar to Homo sapi
anthrax toxin receptor 1 (ANTXR1), transcript variant 3, mRNA
      Hominidae; Homo.
1 (bases 1 to 6
                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Euarchontoglires; Primates; Cate
                                                                                            Homo sapiens
                                                                                                                                                                                  DN993680
                                                                                                                 Homo sapiens (human)
                                                                                                                                                              DN993680.1
                                                                                                                                                                                                                                                                                                                                                                                                       GGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTCGGTGTGAAA
      (bases 1 to 672)
                                                                                                                                                              GI:66253511
```

Euteleostomi;

EST 17-MAY-2005

sapiens

```
GGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCG
GGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAA
                                                                                                                                                                                                                                                                                              CTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                          GTGGAACAGTTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTT
                                                                                                                                                                                                                                                                                                                                                                                               GTGGAACAG-TTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTAC-TTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGGGCAAGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACTGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCAC-GGCGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGACCCGCGAAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                       ATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGCAGGGA
                                                                              ATCATTGCTTTGACTGATGAGAACTCCCATGAAGATCTCTTTTTCTATTCAGAG-AGGGA
                                                                                                                                     AAGGGCCAGTGAGCAGATTTATTAATGAAAACAGACAAGGG--TACAGGACAGCCAGCGTC
                                                                                                                                                                                                                  CCGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41.2%;
98.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 582; DB
Pred. No. 1.2e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 2; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 964;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6
                646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                594
                                                                                                                                     561
                                                                                                                                                                             535
                                                                                                                                                                                                                    501
                                                                                                                                                                                                                                                           477
                                                                                                                                                                                                                                                                                              441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                           621
                                                                                                                                                                                                                                                                                                                                       417
                                                                                                                                                                                                                                                                                                                                                                            381
                                                                                                                                                                                                                                                                                                                                                                                                                 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                          321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
```

```
JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                               ð
                                                                            밁
                                                                                                          Ś
                                                                                                                                                  밁
                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                       ર્
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 571; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                           162
  462
                                      361
                                                                              402
                                                                                                                  301
                                                                                                                                                           342
                                                                                                                                                                                                   241
                                                                                                                                                                                                                                              282
                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                          222
                                                                                                                                                                                                                                                                                                                                                      121 GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACTCTGGTGCTCATCTGCGC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Liu,X., Porter,J., Gau,Y., Hamer,R., Kelly,S., Kovacs,K., Liu,L., Zhang,X., Jay,G. and He,W.
High-throughput cloning of full-length human cDNAs directly from cDNA libraries optimized for large and rare transcripts Unpublished (2005)
Contact: Kovacs, KF
                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: cDNA@origene.com
This EST submission is part of an on-going human full-length
cloning project at Origene Technologies, Inc.
please contact Origene for access.
Origene Technologies, Inc.
6 Taft Ct. Suite 100
Rockville, MD 20850
Tel: (301) 340-3188
http://www.origene.com
Seq primer: pCMV6 Sprime forward vector primer, Origene
Technologies Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AGGACCCGCGAGGAAGGGCCCCGCGGATGGCGCGTCCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    High Throughput cDNA Cloning
OriGene Technologies, Inc. ( www.origene.com )
6 Taft Court, Suite 100, Rockville, MD 20850, USA
Tel: 301 340 3188
Fax: 301 340 8606
                                                                                                                                                                                                                                                                                                                                                                                                                                AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGGCTGCGGGGCCATGGCCACGGCGGAGCG 120
                       CACCCGAGGAACAACCTTAATGAAACTGACAGAAGAAGAAGAACAAATCCGTCAAGGCCT 420
                                                                                                                                                                                           CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTTACTTTTGT 300
                                                                                                                                                                                                                                                                     CGGCCAAGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA 240
                                                                                                                                                                                                                                                                                                                          GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                           AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                        GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTC
                                                                                                                                                               CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                              CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40.4%; Score 571; DB 8; Lot 100.0%; Pred. No. 5.5e-128; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="Organ: Brain; Vector: pCMV6-XL5; Site 1: EcoR1; Site 2: Xho1/Sal1 compatible end ligatio; OlTgo-dT primed reverse transcription optimized for large and GC rich mRNA transcripts, cDNA size selection, optimized ligation for large inserts into mammalian expression vector, random clones selected for end sequence verification of full-length genes"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /tissue type="Whole brain"
/clone_Tib="Human adult whole brain, large insert,
expression library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="TC113711"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . .672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 672;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              161
                                                                                461
                                                                                                                       360
                                                                                                                                                               401
                                                                                                                                                                                                                                                                                                                              281
                                                                                                                                                                                                                                                                                                                                                                                                               221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
  521
```

```
밁
      S
               밁
                       S
                                 밁
                                       S
                 582
642
    541 TGCTTTGACTGATGGAGAACTCCATGAAGAT
                         481
                                 522
TGCTTTGACTGATGGAGAACTCCATGAAGAT
                 540
                                  581
                                          480
```

Search completed: December 19, 2005, 00:48:40 Job time : 6395.95 secs



```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
              იი
                                                      O
                                                                                     a
                                                                                                                                                                                             n
                                                                                                                                                                                                                         Ω
2220024
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                       906.
516.
346.
307.
                                                                                     79.4
55.2
51.6
51.6
51.6
51.6
50.8
80.2
                                                                                                                                                                                                                                                                                                                                                                                Score
49
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Issued_Patents_NA:*

1: /cgn2_6/ptodata/1/ina/5_COMB.seq:*

2: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

3: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

7: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

8: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

9: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-1
1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1303057 seqs, 888780828 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    December 17, 2005, 10:16:44 ; Search time 266.178 Seconds (without alignments) 9442.828 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                              Match Length
                                                                                                                                                                                                                                                                                                                                                                                                Query
                                                                                                                                                                                                                                                                      64.1
36.5
24.5
21.7
21.7
5.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version Copyright (c) 1993 - 2005
               1492
450
612
985
985
985
985
985
2158
2158
2158
1660
3829
3829
3829
3829
3829
3829
3829
                                                                                                                                                                                                                                                                                                                                                                                멂
           US-09-620-312D-8
US-09-799-451-250
US-10-104-047-669
US-09-774-528-297
US-10-113-827-8330
US-09-92-409-25
US-09-322-409-25
US-09-451-527-27
US-09-451-527-27
US-09-451-527-27
US-09-611-578-1
US-08-631-0712-6
US-09-614-912-197
US-09-322-409-8
US-09-322-409-8
US-09-322-409-8
US-09-322-409-8
US-09-322-409-8
US-09-322-409-8
US-09-451-527-8
US-09-451-527-8
US-09-451-527-8
US-09-322-409-8
US-09-451-527-8
US-09-451-527-8
                                                                                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.1.6
Compugen Ltd
         Sequence 8, Appli
Sequence 250, App
Sequence 297, App
Sequence 297, App
Sequence 330, App
Sequence 3357, Appli
Sequence 27, Appli
Sequence 27, Appli
Sequence 27, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 9, Appli
Sequence 8, Appli
Sequence 8, Appli
Sequence 197, App
Sequence 8, Appli
                                                                                                                                                                                                                                                                                                                                                                                Description
```

									ი	ი	ი	ი								
45	44	43	42	41	40	39	38	37	36	35	34	ω ω	32	31	30	29	28	27	26	25
47.4	47.6	47.6	47.6	47.6	47.6	47.6	47.8	48.4	48.4	48.4	48.4	48.4		48.6	48.6	48.6	48.8	48.8	49.4	49.8
3.4	3. <u>4</u>	3.4	3.4	3.4	3.4	3.4	ω .4	3.4	3. <u>4</u>	3.4	3.4	3.4	3.4	3.4	3.4	3. <u>4</u>	ა ა	ω 5	ω	ω .5
1248	2323	1378	530	530	530	323	1766	1898	396	396	396	396	2539	2445	908	603	4167	1039	194	2609
w	w	w	w	w	ω	w	w	N	w	ω	w	w	w	w	w	w	w	ω	w	w
US-09-489-847-101	US-09-149-476-24	US-09-149-476-208	US-10-115-123-28	US-10-012-542-28	US-09-461-325-28	US-09-621-976-10374	US-10-142-835-27	US-08-342-411A-1	US-09-970-966-53	US-09-825-294-53	US-09-713-550-53	US-09-640-173-53	US-10-144-198-21	US-09-949-016-781	US-09-800-729-25	US-10-178-449A-11	US-09-973-278-700	US-09-902-540-1280	US-09-621-976-801	US-09-437-568A-1
Sequence 101, App	Sequence 24, Appl	Sequence 208, App		Sequence 28, Appl	•	. 1	Sequence 27, Appl	Sequence 1, Appli	Sequence 53, Appl		Sequence 53, Appl	•	•	Sequence 781, App		Sequence 11, Appl	,0	Sequence 1280, Ap	Sequence 801, App	≱

ALIGNMENTS

## APPLICANT: Zhao, Qing A. APPLICANT: Wehrman, Tom APPLICANT: Xue, Aidong J. APPLICANT: Yang, yonghong APPLICANT: Wang, Jian-Rui APPLICANT: Wang, Jian-Rui APPLICANT: Wang, Jian-Rui APPLICANT: Wang, Jian-Rui APPLICANT: Wang, Dunrui APPLICANT: Wang, Zhiwei APPLICANT: Domanac, Radoje T. TITLE OF INVENTION: NO. 6569662el Nucleic Acids and TITLE OF INVENTION: Polypeptides FILE REFERENCE: 784CIPEB CURRENT APPLICATION NUMBER: US/9/620,312D CURRENT APPLICATION NUMBER: US/9/620,312D CURRENT APPLICATION NUMBER: 09/552,317 PRIOR APPLICATION NUMBER: 09/552,317 PRIOR APPLICATION NUMBER: 09/552,317 PRIOR APPLICATION NUMBER: 09/488,725 PRIOR APPLICATION NUMBER: 09/488,725 PRIOR APPLICATION SATE: 2000-01-21 NUMBER OF SEQ ID NOS: 1105 SEQ ID NO 8 US-09-620-312D-8 APPLICANT: Tang, Y. Tom APPLICANT: Liu, Chenghua APPLICANT: Asundi, Vinod APPLICANT: Asundi, Vie APPLICANT: Zhang, Jie APPLICANT: Chen, Rui-hong APPLICANT: Zhao, Qing APPLICANT: Zhao, Qing A. APPLICANT: Wehrman, Tom APPLICANT: Xue, Aidong J. APPLICANT: Yang, Yonghong APPLICANT: Wang, Jian-Rui APPLICANT: Zhou, Ping APPLICANT: Zhou, Ping Sequence 8 Patent No. GENERAL INFORMATION: Query Match 64.1%; Best Local Similarity 99.8%; 8, Application US/09620312D o. 6569662 Score 906.8; DB 3; Pred. No. 5.4e-223; Pred. No. 5.4e-223; Length 1609;

Matches 908; Conservative

á

Indels

0;

Gaps

```
RESULT 2
US-09-799-451-250
; Sequence 250, Application US/09799451
; Patent NO. 6783969
; GENERAL INFORMATION:
; APPLICANT: Tang, Y. Tom
; APPLICANT: Zhou, Ping
; APPLICANT: Goodrich, Ryle
; APPLICANT: Asundi, Vinod
                                                                                                                           1106
                                                                                                                                                                     1046
                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             386
                                                                                                                                                                                          841
                                                                                                                                                                                                                986
                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                           926
                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                      866
                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                  906
                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                            746
                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                       989
                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTCATTTTGGACAAATCAGGAAGTGTGCGCTGCACCACTGGAATGAAATCTATTACTTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGGGCAAGGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                       ACTCAATGAG
                                                                                                                                                                                   CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                               TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACCCGAGGAACCATCATGAAACTGACAGAAGACAGAGAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGGGCAAGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                           ACTCAGTAAG
                                                                                                                                                                                                                                                                                                                                                  TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                        1115
                                                                                                                                                910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                 1045
                                                                                                                                                                                                                                                                                                       925
                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                           900
                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                             985
                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                  865
                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                             805
                                                                                                                                                                                                                                                                                                                                                                                                                                        745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANIEM: Homo sapi
; FEATURE;
; FEATURE;
; NAME/KEY: CDS
; LOCATION: (297)...(1
US-09-799-451-250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6783969el Nuclei
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 803
CURRENT APPLICATION NUMBER: US/09/799,45
CURRENT FILING DATE: 2001-03-05
NUMBER OF SEQ ID NOS: 948
SOFTWARE: pt FL_genes Version 2.0
SEQ ID NO 250
LENGTH: 3981
                                                                                                                                                     δ
                                                                                                                                                                                             δ
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                        밁
    RESULT 3
US-10-104-047-669
                                                              Ş
                                                                                                         ð · 함
                                                                                                                                                                               멍
                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 518; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT
                                                                     1158
                                                                                                                1098
                                                                                                                                                           1038
                                                                                            421
                                                                                                                                     361
                                                                                                                                                                                 301
                                                                                                                                                                                                      978
                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                            858
                                                                                                                                                                                                                                                                                                                                                                                                                              678
                                                481
                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                918
                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                  738
                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                        CGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ren, Feiyan
Zhang, Jie
Xue, Aidong J.
Zhao, Qing A.
Wang, Jian-Rui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chen, Rui-hong
Wang, Zhiwei
Wang, Dunrui
Yang, Yonghong
Wehrman, Tom
                                                                                         AAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCCAGTTCTGTCATCA
                                                                                                                                                                                                                          TGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCT
                                                                                                                                                                                                                                                                                                                   GTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGGAAACGGCTTCCGACATGCCCGCAACG
                                                                                                                                                                                                                                                                                                                                                                          TCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATAT
                                                           AGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                                                                  TCACCACCACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGCTGTTCC
                                                                                                                                                                                                                                                                       TGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCT
                                                                                                                                                                                                                                                                                                                                                             TCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATAT
                                                 AGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAGA
                                                                                                                                       TCACCACACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGATCCTGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wehrman, Tom
Ghosh, Reena
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wang, Jian-Rui
Ma, Yunqing
Yamazaki, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                          36.5%;
99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 516.8; DB 3; Pred. No. 1.6e-122; 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic Acids
```

Length

<u>..</u>

60

120

ð

음 성 8 ş 밁 ঠ 멍 र्

음 성

유왕 멍

Ś 밁 Ş 밁 Ś

> 1097 360 1037 300

977 240 917 180 857

420

밁

ঠ 밁

유 성

र्ठ

δ

밁

밁

á

```
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 669
; LENGTH: 2234
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-104-047-669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 669, Application US/10104047

Patent No. 6943241

GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. 6943241e1 full length cDN
FILE REFERENCE: H1-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                             멍
                                                                                                                                                               ঠ
                                                                                                                                                                                                    밁
                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   १
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
밁
                          र्
                                                                 밁
                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 628; Conserv
                                                                                                                                                                                                      1063
                                                                                                                                                                                                                                                                        1003
1243
                                                                 1183
                                                                                                                                   1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        589
                               824
                                                                                                                                                                                                                                      644
                                                                                                                                                                                                                                                                                                         584
                                                                                                                                                                                                                                                                                                                                         943
                                                                                                                                                                                                                                                                                                                                                                       524
                                                                                                                                                                                                                                                                                                                                                                                                             688
                                                                                                                                                                                                                                                                                                                                                                                                                                           464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         104 ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                           AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                      GĊAĠĀĠĀĀĀĀĠĠĊĀĀĀĠĀTĀTĊCĀĠGTCĀĊŦTĠĠĠĠĊTĀĠTĠŦTŦĀTTĠTĠTĠŦĠĠĠĊ 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              САЛАТСССТСАЛАСССТАСАЛАСАСТССАСАЛАСТТСТСССАСАССАССАСАСТТАСАТС 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGTTGGTGCTCAGCGGTCCCGGGGGGGCTGCTGCGCGCCCAGGAGCAGCCCTCCTGCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAGCAAGTTTTCCCT
                                                                                                                                                                                                                                                                                             TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                         ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAATTTATAATTTCGTACAGCAACTTGCGGAGAGATTTGTGAGCCCTGAAATGAGATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAGCCTTTGATCTCTACTTCGTCCTGGACAAGTCTGGGAGTGTGGCAAATAACTGGATT
TTAAGTGGAAGAGGATTCATGCTGGGCAGTCGGAATGGCAGTGTTCTCTCTGCACTTACACT 1303
                               GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG 883
                                                                                        ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC 823
                                                                                                                                    GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC 763
                                                                                                                                                                                                                                                                                                                                           ACCTCCAGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTGGTGCCATCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAATCAGTAAAGGCTTGGAGGATTTAAAACGTGTTAGTCCAGTAGGAGAGACATATATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTTTCATTGTGTTTTCTTCTCAAGCAACTATTATTTTGCCATTAACTGGAGACAGAGGC
                                                                 ACTGAAATCCTAGAATTGCAGCCCTCAAGTGTCTGTGTGGGGGAGGAATTTCAGATTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24.5%;
ilarity 58.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 346.2; DB 3;
Pred. No. 9.2e-79;
0; Mismatches 443;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                        1122
                                                                                                                                                                                                                                                                                                                                             1002
                                                                     1242
                                                                                                                                                                                                                                                                                                           643
                                                                                                                                                                                                                                                                                                                                                                                                              942
                                                                                                                                                                                                                                                                                                                                                                                                                                                523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        708
```

```
APPLICANT: Wang, Dunrui
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: NO. 6743619el Nucleic Ac.
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 802
CURRENT APPLICATION NUMBER: US/09/774,528
CURRENT FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
SOFTWARE: pt_fL_genes Version 2.0
SEQ ID NO 297
LENGTH: 1492
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
FEATURE: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                               ; NAME/KEY: CDS
; LOCATION: (79)..(1434)
US-09-774-528-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 4
US-09-774-528-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                        S
                                                               밁
                                                                                           δ
                                                                                                                              밁
밁
                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 297, Application Patent No. 6743619
GENERAL INFORMATION:
                                                                                                                                                                                              Query Match 21.7%;
Best Local Similarity 59.2%;
Matches 546; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          884
                                                                                                                                                              258 CAGGAAGTGTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACA
                                                                                                                                 N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tang, r. Zhou, Ping Zhou, Ping Ryle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATGGCCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT 1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC 1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTAAATGAAACATATACAACGAGTGTAAAACCAGTAAGTGTACAGCTTAATTCTATGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zhang, Jie
Zhao, Qing A.
Yang, Yonghong
Xue, Aidong J.
Wehrman, Tom
Wang, Jian-Rui
Wang, Dunrui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCCTCCACCCCCCTGCC 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCGCAGCCATCATTGTTATTTTGGTGTTACTGCTACTCCTGGGGATCGGTTTGATGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ĠĠĄĠĠĄĄĄĄTĊTĠŢĊĀŢŢŢĊĄĠĠĄŢĊĄŢŢĄĄŢŢĠĊĄĊĄĠĊĄĊĄĠĄĄŢĠŢŢĊŢĄĄĊĠĠĠ 1482
                             таатдааастдасадаадасададаасааатссдтсааддсстадаадастссадааад
                                                                                  AATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCT
                                                                                                                                 CACGCCGCCGGGCGAATAACTGGAATTGAAATTTATAATTTCGTACAGCAACTTGCGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTCCTGCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCAGTGAGCTTTAAT
 TTTTGCCATTAACTGGAGACAGAGGCAAAATCAGTAAAGGCTTGGAGGATTTAAAACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ren, Feiyan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Liu, Chenghua
Asundi, Vinod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/09774528
                                                                                                                                                                                               Score 307.4; DB 3; Pred. No. 7.3e-69; 0; Mismatches 371;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Acids
                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                Length
                                                                                                                                                                                                   6,
                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1542
                                                                     121
                                                                                                    377
                                                                                                                                                                     317
                                                                                                                                     61
```

```
RESULT 5
US-10-120-988-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
APPLICANT: Tang, Y: Tom
APPLICANT: Goodrich, Ryle
APPLICANT: Goodrich, Ryle
APPLICANT: Liu, Chenghua
APPLICANT: Ren, Feiyan
APPLICANT: Wang, Dunrui
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6919139el Nucleic Ac
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 802CON
CURRENT APPLICATION NUMBER: US/10/120,988
CURRENT FILING DATE: 2002-04-11
PRIOR APPLICATION NUMBER: 09/774,528
PRIOR APPLICATION NUMBER: 09/774,528
PRIOR FILLNG DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
SOFTWARE: pt_FL_genes Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                            Sequence 297, Application Patent No. 6919193 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                 1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCTCCTAGCCCTGGCTCCTCGGGGGGTTCTGGCCCCCTCTGCTGCACTGTGATTATCA 1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCTTGATGTTTCAGTGAGCTTTAATGGAGGAAAATCTGTCATTTCAGGATCATTAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTATGAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTGCCAGGAGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTT
                                                                                                                                                                                                                                                                                                                                                                                  AGGATCCTCCACCACCACCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                 AGGAGGTCCCTCCACCCCCTGCC 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                TACTCCTGGGGATCGGTTGATGTGGTGGTTTTTGGCCCCTTTGCTGCAAAGTGGTTATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCACAGCCACAGAATGTTCTAACGGGATCGCAGCCATCATTGTTATTTTGGTGTTACTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCACCACCACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATCCTGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCTGTCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAAGTGTACAGCTTAATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGAÇAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ĠŦĠŦĠĠĠĠĠĠĠĠŖĂŤŦŦĊĂĠĂŤŦĠŦĊŦŦŖĀĠŦĠĠŔĀĠŖĠĠĸŦŦĊĸŦĠĊŦĠĠĠĊŖĠŦĊĠĠĸ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTAATTCTATACTAGCTCAGTCATGTACTGAAATCCTAGAATTGCAGCCCTCAAGTGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGATTCCAAGGAGCAAGTTTTCCCTGTCAAAGGTGGATTTCAGGCTCTTAAAGGAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGCTAGTGTTTATTGTGTTGGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTTGGACGGTCTGGTGCCATCATATGCAGAGAAAGAGGCAAAAGATATCCAGGTCACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----TCÁGAAAGCAGGAGGCTTGAAAACCTCCAGTATCATAATTGCTCTGACAGATGGCA
                                                                                                                                                                                                                                                                                                US/10120988
                                                                                                                                                                                                                                                                                                                                                                                  918
                                                                                                                                            Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                  895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; SEQ ID NO 297
; LENGTH: 1492
; TYDE: DNA
; TYDE: DNA
; ORGANISM: Homo sapiens
; FBATURE:
; NAME/KEY: CDS
; LCCATION: (79)..(1434)
US-10-120-988-297
                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           묽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                    Ş
                                                                                                                                                          밁
                                                                                                                                                                                 Ş
                                                                                                                                                                                                                     뫄
                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 59.2%;
Matches 546; Conservative
                                                                                                                           1038
                                                                                                                                                                                                                                                                                                596
                                                                                                                                                                                                                                                                                                                                                                                                                                 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           258 CAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTTGTGGAACAGTTGGCTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCT
                                              TGCTCCTAGCCCTGGCTCTCTGGTTGGTTCTGGCCCCTCTGCTGCACTGTGATTATCA
                                                                                                                TCACCACACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATCCTGTTCC
                                                                                                                                                                                                                                                                                           ATGGCAGTGTTCTCTGCACTTACACTGTAAATGAAACATATACAACGAGTGTAAAACCAG
                                                                                                                                                                                                                                                                                                                                                                                  GTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGCAATTGTTTACTGTGTGTGTGAAAGATTTCAATGAGACACACAGCTGGCCCGGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCTGCCAGGAGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATTTGTGAGCCCTGAAATGAGATTATCTTTCATTGTGTTTTCTTCTCAAGCAACTATTA
                                                                                            TCACAGCCACAGAATGTTCTAACGGGATCGCAGCCATCATTGTTATTTTGGTGTTACTGC
                                                                                                                                                              CTCTTGATGTTTCAGTGAGCTTTAATGGAGGAAAATCTGTCATTTCAGGATCATTAATTG
                                                                                                                                                                                        AAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTATCTCCAGTTCTGTCATCA
                                                                                                                                                                                                                              TAAGTGTACAGCTTAATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAA
                                                                                                                                                                                                                                                                                                                              TGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGATTCCAAGGAGCAAGTTTTCCCTGTCAAAGGTGGATTTCAGGCTCTTAAAGGAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGCTAGTGTTTATTGTGTTGGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTTGGÁCGGTCTGGTGCCATCATÁTGCAGÁGÁGÁGÁGÁGGCAAÁGÁTATCCAGGTCACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ----TCAGAAAGCAGGAGGCTTGAAAACCTCCAGTATCATAATTGCTCTGACAGATGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTATGAAAACAGACAAGGGTACAGGCAGCGTCATCATTGCTTTTGACTGATGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTAGTCCAGTAGGAGAGACATATATCCATGAAGGACTAAAGCTAGCGAATGAACAAAT--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTTGCCATTAACTGGAGACAGAGGCAAAATCAGTAAAGGCTTGGAGGATTTAAAACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACGCCGCCGGGCGAATAACTGGATTGAAATTTATAATTTCGTACAGCAACTTGCGGAGA
                             TACTCCTGGGGATCGGTTTGATGTGGTGGTTTTTGGCCCCTTTGCTGCAAAGTGGTTATTA
                                                                                                                                                                                                                                                      TTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                 TTAATTCTATACTAGCTCAGTCATGTACTGAAATCCTAGAATTGCAGCCCTCAAGTGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 307.4; DB 3;
Pred. No. 7.3e-69;
0; Mismatches 371;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1492;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                              1157
                                                                                                                                                              775
                                                                                                                                                                                                                                                                                                  655
                                                                                                                                                                                                                                                                                                                                                                  595
                                                                                                                                                                                                                                                                                                                                                                                                   857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                 977
                                                                                                                                                                                                                                                                                                                                 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
```

1158

AGGAGGTCCCTCCACCCCCTGCC 1180

```
ঠ
                                                                                                                                                                                                                                                                    US-09-902-540-1357
; Sequence 1357, Applic
; Patent No. 6833447
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ৪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-131-827-8330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
US-10-131-827-8330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                           श्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: LY, NGOC
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING AUTOIMMUNE
TITLE OF INVENTION: CHRONIC INFLAMMATORY DISEASES
FILE REFERENCE: 506612000120
CURRENT FILING DATE: 2002-09-06
PRIOR APPLICATION NUMBER: US/10/131,827
CURRENT FILING DATE: 2001-06-02
PRIOR APPLICATION NUMBER: US 10/006,290
PRIOR FILING DATE: 2001-06-08
PRIOR FILING DATE: 2001-06-08
RUMBER OF SEQ ID NOS: 9090
SOFTWARE: PALENTIN VERBION 3.1
SEQ ID NO 8330
LENGTH: 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Wohlgemuth, Jay
APPLICANT: Fry, Kirk
APPLICANT: Woodward, Robert
APPLICANT: Ly, Ngoc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 8330, Ap
Patent No. 690582
APPLICANT: Goldman, Barry S.
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Wiegand, Roger C.
TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof FILE REFERENCE: 38-10(15849)B
CURRENT APPLICATION NUMBER: US/09/902,540
CURRENT FILING DATE: 2001-07-10
PRIOR FILING DATE: 2001-07-10
PRIOR FILING DATE: 2000-07-10
NUMBER OF SEQ ID NOS: 16825
SEQ ID NO 1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 57.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          932 ACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                             250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACCACACAC 105:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCCCTGCC 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTCTCCTCTGGTGGTTCTGGCCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCA 1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               refrereaceerrecarecrescentesecreteserrecrestrectesecretasecere 111:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                             ACCCCCCC 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTTTGATGTGGTGGTTTTGGTCCCTTTGCTGCTAAGTGGTTATTAAGGGATCCTCCACC 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ĠŢĠĀĠĊŢŢŦĀĀŢĠĠĀĠĠĀĀĀĀŤĊŢĠŦĊĀŢŢĊĀĠĠĀŢĊĀŢŦĀĀŢŢĠĊĠĊĠĊĊĀĊĀĠĀĀ 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTTCTAACGGGATCGCAGCCATCATTGTTATTTTGGTGTTACTGCTACTCCTGGGGATC 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/10131827
                                                                                                                                                                                                                                                                                                               Application US/09902540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 79.4; DB 3;
Pred. No. 1.8e-10;
0; Mismatches 106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 450;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

```
; ORGANISM: Canis familia
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (74)..(901)
US-09-322-409-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                        δ
                                                          밁
                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-322-409-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-902-540-1357
                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Ver.
SEQ ID NO 25
LENGTH: 985
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 25, App
Patent No. 64719
                                                                                                                       Query Match 3.6%;
Best Local Similarity 65.8%;
Matches 75; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                     APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS,
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-29
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER: OF SEO, ID NOS: 154
NUMBER: OF SEO, ID NOS: 154
NUMBER: OF SEO, ID NOS: 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: unsure
LOCATION: (1)..(612
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Myxococcus FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1301 CTCAATCTAGACAGTCTTTTCCTCTAGTTCCCTGTATTCAAATCCCAGTGTCTAACATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1374 АТGAAATCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1254 ACACAGCCCGTGCAACGTATTTTATACAATGCTCTGAAAATCATAGTCTCAATCTAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       864 CCCTCTGTACAAAGTCCTTGCCCCCAAGAAATTGTATATAAATCATCCTTTTCTACCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09322409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (612)
                                                                                                                                                                                                                                                 familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unsure at all n locations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           xanthus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%;
                                                                                                                      Score 51.6; DB 3
Pred. No. 0.0037;
0; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 55.2; DB 3; Pred. No. 0.00035;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                      DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  104;
                                                                                                                           39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 612;
                                                                                                                                                      Length
                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                           0
```

RESULT 9 US-09-322-409-27/c ; Sequence 27, Application US/09322409

문

```
S
                                                           밁
                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-322-409-27
                                                                                                                                                                                                                   US-09-451-527-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-451-527-25
                                                                                                                                                                                                                                                                                                                                         APPLICANT: Dreftz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CAUINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OP SEQ ID NOS: 1174
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 25, Application US/09451527 Patent No. 6482403 GENERAL INFORMATION:
                                                                                                                                                                                                                   FEATURE:
NAME/KEY: CDS
NAME/KEY: (74)..(901)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 27
LENGTH: 985
                                                                                                                                       Matches
                                                                                                                                                       Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No. 6471957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Sim, Gek-Kee APPLICANT: Yang, Shumin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Sim, Gek-Kee APPLICANT: Yang, Shumin
                                                                                                                                                                                                                                                                                           ORGANISM: Canis familiaris
                                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                 LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
1301 CTCAATCTAGACAGTCTTTTCCTCTAGTTCCCTGTATTCAAATCCCAGTGTCTAACATTC 1360
                                                                                               1301 CTCAATCTAGACAGTCTTTTCCTCTAGTTCCCTGTATTCAAATCCCAGTGTCTAACATTC 1360
                                                           864 CCCTCTGTACAAAGTCCTTGCCCCCAAGAAATTGTATATAAATCATCCTTTTCTACCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION:
                                                                                                                                                                                                                                                                                                                                   985
                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCTCTGTACAAAGTCCTTGCCCCCAAGAAATTGTATATAAATCATCCTTTTCTACCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                       Conservative
                                                                                                                                                       3.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.6%;
                                                                                                                                   Score 51.6; DB 3
Pred. No. 0.0037;
0; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 51.6; DB 3; Pred. No. 0.0037;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                           DB 3;
                                                                                                                                       39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         39;
                                                                                                                                                                           Length 985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 985;
                                                                                                                                       Indels
                                                                                                                                     <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63
                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-451-527-27/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-07-602-608-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 75; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 27
LENGTH: 985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Applic
Patent No. 5382524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Ureitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Monderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/320,409
EARLIER APPLICATION NUMBER: 09/320,409
EARLIER APPLICATION NUMBER: 09/320,409
EARLIER FILING DATE: 1999-05-28
EARLIER TILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Desnick, Robert J.
APPLICANT: Bishop, David F.
APPLICANT: Ioannou, Yiannis A.
APPLICANT: Wang, Anne M.
TITLE OF INVENTION: CLONING AND EXPRESSION OF BIOLOGICALLY
TITLE OF INVENTION: ACTIVE ALPHA-N-ACETYLGALACTOSAMINIDASE
NUMBER OF SEQUENCES: 24
                    CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A.
                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: PENNIE & EDMONDS
STREET: 1155 Avenue of the Americas
                                                                                   APPLICATION NUMBER: FILING DATE: 24-OCT
                                                                                                                                                                                                                                                                    STATE: New York COUNTRY: U.S.A. ZIP: 10036
                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: PEN
STREET: 1155 A
CITY: New York
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1301 CTCAATCTAGACAGTCTTTTCCTCTAGTTCCCTGTATTCAAATCCCAGTGTCTAACATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCTCTGTACAAAGTCCTTGCCCCCAAGAAATTGTATATAAATCATCCTTTTCTACCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/07602608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09451527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                 24-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.6%;
                                                                                                           US/07/602,608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 51.6; DB :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                         Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

```
ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
US-08-261-578-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-07-602-608-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/08261578 Patent No. 5491075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 62.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/602,608
FILING DATE: 24-OCT-1990
ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, LAURA A.
REGISTRATION NUMBER: 30,742
REFERRATION NUMBER: 6923-008
TELEFONMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                               SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/261,578
FILING DATE: 17-JUN-1994
CLASSIFICATION: 435
                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC comparible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Ioannou, Yiannis A.
APPLICANT: Wang, Anne M.
TITLE OF INVENTION: CLONING AND EXPRESSION OF BIOLOGICALLY
TITLE OF INVENTION: ACTIVE ALPHA-N-ACETYLGALACTOSAMINIDASE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Desnick, Robert J.
APPLICANT: Bishop, David F.
APPLICANT: Ioannou, Yiannis A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                             CITY: New York
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                     ZIP: 10036
                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENGTH: 2158 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1285 CTCTGAAAATCATAGTCTCAATCTAGACAGTCTTTTCCTCTAGTTCCCTGTATTCAAATC 1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2025 CACTGGGAGTGAGGGTCACAAAGGAGACCTTGGCTCCCTCAGGTCACCAATAAACCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAAAAAAA 2154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAAAAAA 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New York
                                                                                                                                                                                                                                                                                                                                                                                                                             1155 Avenue of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
345..1580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                              PENNIE & EDMONDS
                                                                                                                                                                                                                                                                                                                                                                                                                             the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6923-008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 51.6; DB 2; Length 2158; Pred. No. 0.0052;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
APPLICANT: Allen, Steve
APPLICANT: Butler, Karla
APPLICANT: Helentjaris, Tim
APPLICANT: Helentjaris, Tim
APPLICANT: Macool, Dan
TITLE OF INVENTION: Regulator of Sugar and Hormone Res
FILE REFERENCE: BB1409 US NA
CURRENT APPLICATION NUMBER: US/09/722,971
CURRENT APPLICATION NUMBER: 000-11-27
PRIOR APPLICATION NUMBER: 60/169969
PRIOR FILING DATE: 1999-12-09
PRIOR FILING DATE: 1999-12-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 14
US-09-722-971-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                    밁
                                                                                Ś
                                                                                                              밁
                                                                                                                                       Ś
                                                                                                                                                                                                                               LENGTH: 1660
TYPE: DNA
ORGANISM: Zea mays
US-09-722-971-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-261-578-1
                                                                                                                                                                                                                                                                                       SOFTWARE:
SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 9, Application US/09722971 Patent No. 6599408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                       Matches
                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 2158 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1405 AAAAAAAAA 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2145 AAAAAAAAAA 2154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1285 CTCTGAAAATCATAGTCTCAATCTAGACAGTCTTTTCCTCTAGTTCCCTGTATTCAAATC
                                                                                                                                 1274 TTTATACAATGCTCTGAAAATCATAGTCTCAATCTAGACAGTCTTTTCCTCTAGTTCCCT
                        1394 АЛАЛАЛАЛАЛАЛАЛАЛАЛАЛА 1414
                                                      85;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       similarity 62.3%;
                                                                                                                                                                                                                                                                                                     Microsoft Office 97
                                                                                 TTGGTCCAACGCTTTGAAACCCTTAGACTGTTTCTTTGTGATCTTTGCGTTCGATTTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACTGGGAGTGAGGGTCACAAAGGAGACCTTGGCTCCCTCAGGTCACCAATAAACCTGTT
AAAAAAAAAAAAAAAAAA 1640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDS
345..1580
                                                                                                                                                                                     3.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 51.6; DB 2
Pred. No. 0.0052;
0; Mismatches 4
                                                                                                                                                                       Score 51.4; DB 3; Length 1
Pred. No. 0.0052;
0; Mismatches 56; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 2158;
                                                                                                                                                                                                  Length 1660;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                           Responses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                         Gaps
                                                                                                                                               1333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1344
                                                                                                                  1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                         0
```

RESULT 15 US-08-631-097-8 ; Sequence 8, Application US/08631097

```
US-08-631-097-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/631,097
FILING DATE: 12-Apr-96
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION UMBER: PCT/US94/11598
FILLING DATE: 12-Oct-94
ATTORNEY/AGENT INFORMATION:
NAME: COhen, Herbert
REGISTRATION NUMBER: 25,109
REFERENCE/DOCKET NUMBER: 0744.057
TELEPHONE: (202)463-7700
TELEPAX: (202)463-7700
TELEPAX: (202)473-6915
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 3829 base pair
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                        CLONE: not applicable
CLONE: not applicable
POSITION IN GENOME:
CHRONOSOME/SEGMENT: not applicable
MAP POSITION: not applicable
UNITS: not applicable
FEATURE:
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent No. 5968816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
MOLECULE TYPE: Genomic DNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: not applicable
ORIGINAL SOURCE:
                                                                                      NAME/KEY: SEQ ID. NO:8 is the sequence
NAME/KEY: in claim 1(vi) starting at triplet in position 201-203
NAME/KEY: and ending at the triplet 3018-3020
LOCATION: not available
IDENTIFICATION METHOD: experiment-
IDENTIFICATION METHOD: in specification
OTHER INFORMATION: programmed cell death
PUBLICATION INFORMATION: not available
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: ASCII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Kimchi, Adi
TITLE OF INVENTION: Tumor Suppressor Genes,
TITLE OF INVENTION: Proten Encloded Thereby, and Use of Said Genes and Protein
NUMBER OF SEQUENCES: 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                          CELL TYPE: leucocyte
CELL LINE: HeLa
ORGANELLE: not applicable
IMMEDIATE SOURCE:
LIBRARY: not applicable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN: not applicable INDIVIDIAL ISOLATE: not applicable DEVELOPMENTAL STAGE: not applicable HAPLOTYPE: not applicable TISSUE TYPE: blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 900 17th
CITY: Washington
STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: Wigman, Cohen, Leitner, & Myers, P.C.
900 17th Street, N.W., Suite 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
  3.6%;
74.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.50 inch, 1.44 Mb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     applicable
  Score 50.8; DB 2; Length 3829; Pred. No. 0.011;
```

밁 Ş В Ş Matches 3796 1388 64; AAAAAAAAAAAAAAAAAAAAAAAA 3821 Conservative 0; Mismatches 22; Indels 0, Gaps 0

Search completed: December 17, 2005, 13:37:32 Job time : 269.178 secs

```
Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being predicted by analysis of the total score distribution.
                1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
1193.8
11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Published Applications NA Main:*

1: /cgn2 6/ptodata/1/pubpna/US07 PUBCOMB.seq:*

2: /cgn2 6/ptodata/1/pubpna/US09 PUBCOMB.seq:*

3: /cgn2 6/ptodata/1/pubpna/US09A PUBCOMB.seq:*

4: /cgn2 6/ptodata/1/pubpna/US09A PUBCOMB.seq:*

5: /cgn2 6/ptodata/1/pubpna/US10B PUBCOMB.seq:*

6: /cgn2 6/ptodata/1/pubpna/US10B PUBCOMB.seq:*

7: /cgn2 6/ptodata/1/pubpna/US10B PUBCOMB.seq:*

8: /cgn2 6/ptodata/1/pubpna/US10B PUBCOMB.seq:*

9: /cgn2 6/ptodata/1/pubpna/US10E PUBCOMB.seq:*

10: /cgn2 6/ptodata/1/pubpna/US11E PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              December 17, 2005, 13:22:55; Search time 1300.57 Seconds (without alignments) 8990.628 Million cell updates/
                100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IDENTITY_NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-1
1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9793542 seqs, 4134689005 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                10 US-11-047-78-11
6 US-10-133-937-58
6 US-10-133-937-58
8 US-09-918-715-176
3 US-09-918-715-231
6 US-10-474-794-231
9 US-10-979-159-231
10 US-11-047-78-5
10 US-11-047-278-7
3 US-09-796-753-11
6 US-10-038-307-1
6 US-10-038-307-1
7 US-11-048-307-17
8 US-10-038-307-17
9 US-10-038-307-17
9 US-10-038-307-17
9 US-10-038-307-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               띪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19587084
          Sequence 1, Appli Sequence 58, Appl Sequence 58, Appl Sequence 176, App Sequence 198, App Sequence 176, App Sequence 231, App Sequence 231, App Sequence 231, App Sequence 7, Appli Sequence 11, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1777, Appli Sequence 1777, Appli Sequence 17, Appli Sequence 13, Appli Sequence 15, Appli Sequ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; LENGTH: 1414
; TYPE: DNA
; ORGANISM: Homo sapiens
; PEATURE:
; NAME/KEY: CDS
; LOCATION: (104)..(1207)
US-11-047-278-1
                                                     δ
                                                                                                                 밁
                                                                                                                                                                5
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-11-047-278-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
LENGTH: 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 1414; Conservative
                                                        181
                                                                                                                        121
                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                           .
                                                                                                                                                                                                                                                                                                                                                                                                                                           ш
```

4 4 5 4	43	42	41	40	39	38	37	36	35	υ 4	ω u	32	31	30	29	28	27	26	25	24
853.4 853.4	853.4	853.4	867.6	867.6	890	894.6	905.2	906.8	906.8	906.8	914.4	914.4	950.8	950.8	951	951	951.4	951.4	951.4	951.4
60.4 60.4	60.4	60.4	61.4	61.4	62.9	63.3	64.0	64.1	64.1	64.1	64.7	64.7	67.2	67.2	67.3	67.3	67.3	67.3	67.3	67.3
5220 5220	5220	5220	1623	1623	1436	1608	1718	1609	1609	1609	1047	1047	1650	1650	1008	1008	1713	1713	1056	1056
<b>6</b> 6	ω	w	σ	σ	10	თ	8	ø	6	ഗ	0	σ	σ	σ	ტ	σ	σ	σ	σ	9
US-10-474-794-186 US-10-474-794-300	US-09-918-715-300	US-09-918-715-186	US-10-201-292-11	US-10-038-307-11	US-11-047-278-9	US-10-201-292-35	US-10-357-930-30300	US-10-122-851-8	US-10-117-722-8	US-10-037-270-8	US-10-201-292-21	US-10-038-307-21	US-10-201-292-9	US-10-038-307-9	US-10-201-292-25	US-10-038-307-25	US-10-201-292-19	US-10-038-307-19	US-10-201-292-23	US-10-038-307-23
• •	Sequence 300, App	٠		Sequence 11, App	Sequence 9, App	Sequence 35, Appl	_	Sequence 8, Appli	Sequence 8, Appli		•	Sequence 21, App	Sequence 9, Appli	Sequence 9, Appli	Sequence 25, Appl	•	•	Sequence 19, Appl	Sequence 23, Appl	Sequence 23, Appl

## ALIGNMENTS

Searched:

9

```
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/99970,076
PRIOR APPLICATION NUMBER: 05/9970,076
PRIOR FILING DATE: 2001-10-03
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ. ID NOS: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/11047278 Publication No. US20050196407A1
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.0%; Score 1414; Best Local Similarity 100.0%; Pred. No. 0;
                                                                                                      121 GAGAGCCCTCGGCATCGGCTTCCAGTGGCCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC 180
CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                               GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                  AGCGTGGGAAGGAAGCGGACCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG 120
                                                                                                                                                                                                                                                                                                    AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                              AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                           AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                DB 10;
                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                             Length 1414;
                                                                                                                                                                                                                                                                                                                                                                                  <u>.</u>.
                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                 60
                                      240
                                                                                                                                                                                                                                                                                                                                                                                    0
```

Result

ŏ.

```
1141
                                                                                                                                                                                 1021
                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                    CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
CCTGCTGATCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG 1140
                                                                                                                                                                                                                                        AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                        GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                        AATAAAATAACAAGAAGAAGAAGAAAGAAAGAAATCCCACAGAAAACAGATAACCTAACACAGC
                                                                                                                                                                               CTCCAGTTCTGTCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                            CTCCAGTTCTGTCATCACCACCACCACACTGTTCTGACGGTTCCATCCTGGCCATCGC 1080
                                                                                                                                                                                                                                                                                                                                                               TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                            TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                            GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                            AATAAAATAACAAGAAGAAGAAAGAAAGAAATCCCACAGAAACAGATAACCTAACACAGC
                                                                                                                                                                                                                             AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                  1020
                                                                                                                                                                                                                             1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                              1200
                                                                                                                                                                                 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                            1260
                                                                  1260
                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                         960
                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                  780
```

중 음 중

음 성

В

9 9 9 9 9

음 성 음

Ś

음성 음성 음성

음 성 음

```
Sequence 58, Application US/10133937

| Sequence 58, Application No. US20030207278A1 |
| GENERAL INFORMATION: |
| GENERAL INFORMATION: |
| APPLICANT: Khan, Javed |
| APPLICANT: Ringner, Markus |
| APPLICANT: Meltzer, Markus |
| APPLICANT: Meltzer, Paul |
| TITLE OF INVENTION: METHODS FOR ANALYZING HIGH DIMENSIONAL DATA FOR CLASSIFYING, |
| TITLE OF INVENTION: DIAGNOSING, PROGNOSTICATING, AND/OR PREDICTING DISEASES AND |
| TITLE OF INVENTION: OTHER BIOLOGICAL STATES |
| FILE REFERENCE: 11613.56US01 |
| CURRENT APPLICATION NUMBER: US/10/133,937 |
| CURRENT FILING DATE: 2002-11-04 |
| NUMBER OF SEQ ID NOS: 99 |
| SOFTWARE: PATENTIN VERSION 3.1 |
| SEQ ID NO 58 |
| LENGTH: 1454 |
| TYPE: DNA |
| ORGANISM: Homo sapiens |
                                                                                                                                          밁
                                                                                                                                                                   Ś
                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 2
US-10-133-937-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                       밁
                                                                S
                                                                                                              8
                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 1414;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1414; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1321
                                                                                                                                                341
                                                                                                                                                                                                                                                                                                                                                101
                    481
                                              461
                                                                     421
                                                                                             401
                                                                                                                     361
                                                                                                                                                                     301
                                                                                                                                                                                               281
                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                221
                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                                                                                                      بر
                                                                                                                                              CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                               CGGGCAAGGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                            GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                            AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGTGGGAAGGAGCGCTCCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
              CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                             CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                               AGCGTGGGAAGGAAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                 280
                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                 100
 580
                         540
                                               520
                                                                         480
                                                                                                460
                                                                                                                       420
                                                                                                                                                400
                                                                                                                                                                        360
                                                                                                                                                                                                340
                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                 220
                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                                                                                                        60
```

```
RESULT 3
US-10-159-563-58
(Sequence 58, Application US/10159563)
(Sequence 58, Application US 20040009154A1)
(FUND CONTROL OF CONTROL OF US 20040009154A1)
(FUND CONTROL OF US 20040009154A1)
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ક
                                                                                                                                                                               ঠ
                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                      .1301
                                                                                                                                                                                                                                                                              1261
                                                                                                                                                                                                                                                                                                    1241
                                                                                                                                                                                                                                                                                                                                                1181
                                                                                                                                                                                                                                                                                                                                                                      1141
                                                                                                                                                                                                                                                                                                                                                                                             1121
                                                                                                                                                                                                                                                                                                                                                                                                                                        1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                    1381
                                                                                                                                                                                                           1361
                                                                                                                                                                                                                                 1321
                                                                                                                                                                                                                                                                                                                           1201
                                                                                                                                                                                                                                                                                                                                                                                                                  1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1001
                                                                                                                                                                1421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCGTGCAACGTATTTTATACAATGCTCTGAAAATCATAGTCTCAATCTAGACAGTCTTTT
                                                                                                                                                                                                                                                                                                  AATAAAATAACAAGAAGAAGAAGAAAGAAAGAAATCCCACAGAAACAGATAACCTAACACAGC 1260
                                                                                                                                                                                                                                                                                                                                                                                                            CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                CAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
                                                                                                                                                                            CCGTGCAACGTATTTTATACAATGCTCTGAAAATCATAGTCTCAATCTAGACAGTCTTTT
                                                                                                                                                                                                                                                                                                                                                 CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAATAA
                                                                                                                                                                                                                                                                                                                                                            CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                             censersarecriserecerasecersserecressers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                            THE SAME FOR OF SELECT CA
                 CANCERS
                                                                                                                                                                                                                                                                                                                                                                                                                    1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1020
                                                                                                                                                                                                                                                                                                                                                  1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            640
                                                                                                                                                                                                                                                                                                                                                                                               1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/159,563
CURRENT FILING DATE: 2002-12-09
PRIOR APPLICATION NUMBER: US 10/133,937
PRIOR FILING DATE: 2002-04-25
NUMBER OF SEQ ID NOS: 444
SOFTWARE: PatentIn version 3.1
SEQ ID NO 58
LENGTH: 1454
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
     δ
                     밁
                                            δ
                                                                        밁
                                                                                       S
                                                                                                                   밁
                                                                                                                                     S
                                                                                                                                                               닭
                                                                                                                                                                               S
                                                                                                                                                                                                           문
                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-159-563-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 1414;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local 9
                                                                                                                      701
                                                                                                                                           661
                                                                                                                                                                 641
                                                                                                                                                                                      601
                                                                                                                                                                                                              581
                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                          521
                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                     461
                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                  401
                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                               341
                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                          281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101
        841
                                                 781
                                                                        761
                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      h 100.0%;
Similarity 100.0%;
14; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                    ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                 TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGGTGGTGGAAAGATTTCAATGAGAC
                                                                                                                                                                                                              CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                              GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                          GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGGCAAGGGGGACGCAGGGAGGATTTGACCTGTACGGCGGGGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCGTGGGAAGGAGCGCTGCTCTCCCCGGGCTGCGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCCTGAGGGTCGTGGCGAGTTCGCGG
       CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGGTTCAAGATCAATGACTCGGTCAC
                                         TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                  CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                          GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                             TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1414;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               몂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100
                                                     840
                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                 400
                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                            340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
          900
                              880
                                                                           820
                                                                                                780
                                                                                                                        760
                                                                                                                                             720
                                                                                                                                                                                         660
                                                                                                                                                                                                               640
                                                                                                                                                                                                                                                           580
                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                        520
                                                                                                                                                                                                                                                                                                                                                     460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

LENGTH: TYPE: DN GRGANIS S-09-918-71 Query Matc Best Local Matches 11	(n	; APPLICANT: Brad St. Croix ; APPLICANT: Bert Vogelstein ; APPLICANT: Kenneth Kinzler ; APPLICANT: Kenneth Kinzler ; TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS ; TILE REFERENCE: 1107.001.34 ; CURRENT APPLICATION NUMBER: US/09/918,715 ; CURRENT FILING DATE: 2001-08-01 ; PRIOR APPLICATION NUMBER: 60/222,599 PRIOR APPLICATION NUMBER: 60/222,599 PRIOR FILING DATE: 2000-08-02	Db 1421 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Db 1301 CCGTGCAACGTATTTTATACAATGCTCTGAAAATCATAGTCTCAATCTAGACAGTCTTTT 1360  Qy 1321 CCTCTAGTTCCCTGTATTCAAATCCCAGTGTCTAACATTCAAATAATAAGCTATATGAAAT 1380	OY 1191 CIGCACIG GAILE CHANGE COLLEGE GROWN IN THE	1021 CTCCAGTTCTGTCATCACCACCACCACCACTGTTCTGACGGTTCCATCCTGGCCATCGG	Db 881 CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGGTCAATGACTCAGTCAC 940  Qy 901 ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTACTGTGTCCAGCGCCTATCTT 960
B & B & B &	D Oy Db	Q	Db Qy	D	D O D O C	\$ Q B Q B	S B S B S
961 AAAGAAGTTGGCATGAAAGCTGCACGGTCAGGTCAACGATGAACGATGAGCTCTTTTAT 1020	881 CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGGTCCAGGATCAATGACTCGTGTCAC 940 901 ACTCAATGAGAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCCTATCTT 960	721 GGCTCTGCAAGGCATCAACTCTAATTTTGAAGAAGTCCTGCAATTCTAGCAC /80		481 GGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCCAGC	CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT	221 CCGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA 280  241 CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT 300  [	61 AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG 120

```
APPLICANT: Brad St. Croix
APPLICANT: Brad St. Croix
APPLICANT: Bart Vogelstein
APPLICANT: Kenneth Kinzler
FILE ART Kenneth Kinzler
FILE REFERENCE: 1107.00134
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR PPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-01
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 231
LENGTH: 5540
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 5
US-09-918-715-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                 ð
                                                                                                                                                                                      片
                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                  र्
                   ð
                                                    ₽
                                                                                    δ
                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 231, Application No. US200 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 1195; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1141
                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                      421
                                                                                                                                                                                        401
                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                         341
                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                         281
                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                            221
                      541
                                                      521
                                                                                     481
                                                                                                                     461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  μ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGGCAAGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCCGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
   CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                          GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                            GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC 360
                                                                                                                                                                                                                                                                                                                           CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                               CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                              CGGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCGTGGGAAGCGGACCCTGCTCTCCCCGGGCTGCGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGACCCGCGAGGAAGGGCCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                         CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                       Application US/09918715
o. US20030017157A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   84.4%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1193.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                             340
                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                              280
                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                      600
                                                        580
                                                                                                                          520
                                                                                                                                                                                         460
                                                                                                                                                                                                                                                            400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
Sequence 138, Application US/10301822
Publication No. US20030148410A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Schaegel, Robert
APPLICANT: Manatkar, Shubhangi
APPLICANT: Monahan, John E.
TITLE OF INVENTION: MOYEL GENES, COMPOSITIONS, KITS,
TITLE OF INVENTION: MOYEL GENES, COMPOSITIONS, KITS,
TITLE OF INVENTION: MOYEL GENES, COMPOSITIONS, KITS,
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPMO1-029P2RNM
CURRENT APPLICATION NUMBER: US/10/301,822
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/381,978
PRIOR APPLICATION NUMBER: US 60/381,978
PRIOR APPLICATION NUMBER: US 60/381,978
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR FILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
SOFTWARE: FastSEQ for Windows Version 4.0
SOFTWARE: FastSEQ for Windows Version 4.0
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 6
US-10-301-822-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGAGAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGAGTGAGGAAAA 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTGCTGATCCTGCTCCTAGCCCTGGCTCTCCTCTGGGGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                KITS, AND
N, ASSESSMENT,
                                                                                                                                                                                                                                                                 PREVENTION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        640
```

960

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; NAME/KEY: CDS
; LOCATION: (144)...(1838)
US-10-301-822-198
                                                                                               밁
                                                                                                                  δ
                                                                                                                                      밁
                                                                                                                                                  δ
                                                                                                                                                                   유 성
                                                                                                                                                                                                   8
                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                              밁
                                              S
                                                                 g
                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 99.0
Matches 1195; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM:
FEATURE:
               901
                                 881
                                                841
                                                                  821
                                                                                  781
                                                                                                    761
                                                                                                                     721
                                                                                                                                      701
                                                                                                                                                       661
                                                                                                                                                                        641
                                                                                                                                                                                       601
                                                                                                                                                                                                         581
                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                          521
                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                            461
                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                              401
                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                341
                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                  281
                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                   221
                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         μ
                                                                                                                                                                                                                                           AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
                                                                                                    TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                         CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                           GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAAATGTCCTTTTATTGTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                             CGGGCAAGGGGACGCAGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGACCCGCGAGGAAGGGCCCCGCGGATGGCGCCTCCCTGAGGGTCGTGGCGAGTTCGCGG
         ACTCAATGAGAAGCCCTTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCCTATCTT
                                          CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                  TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                            TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGAGGAAACGGCTT
                                                                                                                                      ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                  ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                        TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                             CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                 GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                  CTTCATTT
                                                                                                                                                                                                                                                                                                                                                                                             CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                 CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sapiens
                                                                                                                                                                                                                                                                                                                                                                                 84.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Score 1193.8; ; Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>۳</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                    280
1000
                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                960
                                 940
                                                                   880
                                                                                                    820
                                                                                                                                      760
                                                                                                                                                                        700
                                                                                                                                                                                         660
                                                                                                                                                                                                          640
                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                             520
                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                              460
                                                                                                                                                                                                                                                                                                                                                 400
                                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                      220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                    ð
                                                                                        밁
                                                                                                         Ş
                                                                                                                              밁
                                                                                                                                            S
                                                                                                                                                             밁
                                                                                                                                                                              δ
                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                        밁
                                                         В
                                                                       δ
                                                                                                                                                                                                             Ś
```

```
Sequence 176, Application US/10474794
Publication No. US20040213793A1
GENERAL INFORMATION:
APPLICANT: Carson-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Vogelstein, Bert
ITILE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 176
LENGTH: 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: DNA; ORGANISM: Homo sapiens US-10-474-794-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 7
US-10-474-794-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 1195; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                          161
                      361
                                                                                                                                                                                                 221
                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                        AGGACCCGCGAGGAAGGGCCCCCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTGCTGATCCTGCTTCCTGCTCCTAGCCCCTGGCTCCTCTGGTGGTTCTGGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                              GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTC
                                                                                                                           CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                 AGCGTGGGAAGGAGCGCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                  AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                    AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCTGCCGAGGAGAGTGAGGAAGA 1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cerecrearecrerrecreerecreerecrerrecrerrecreserecrerecres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC
                    CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                   CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
84.4%;
ilarity 99.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1193.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PATTERNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ν
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                  300
                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                        100
                        420
                                                           400
                                                                                           360
                                                                                                                                340
                                                                                                                                                                                                   280
                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                                                                                    120
```

```
RESULT 8
US-10-474-794-231
Sequence 231, Application US/10474794
Publication No. US20040213793A1
GENERAL INFORMATION:
APPLICANT: Carson-Walter, Eleanor
APPLICANT: Vogelstein, Bert
APPLICANT: Vogelstein, Bert
APPLICANT: Winzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: 05/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/280,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 3-69
                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           용
                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                             밁
                                                                                                                                                                                                           S
                                                                                                                                                                                             1181
                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                 1121
                                                                                                                                                                                                                                                                     1061
                                                                                                                                                                                                                                                   1081
                                                                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                                           1001
                                                                                                                                                                                                                                                                                                                                               941
                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                     881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           401
                                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                         821
                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                               761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                          ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                      CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                               CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                             <u>AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT</u>
                                                                                                                                                                                                                                                                                                                                               ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                         TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                               1197
                                                                                                                                                                                              1237
                                                                                                                                                                                                                                                                                          1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                       1120
                                                                                                                                                                                                                                                                                                             1060
                                                                                                                                                                                                                                                                                                                                                 1000
                                                                                                                                                                                                                                                                                                                                                                   960
                                                                                                                                                                                                                                                                                                                                                                                      940
                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                           880
                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; SOFTWARE: FastSEQ f
; SEQ ID NO 231
; LENGTH: 5540
; TYPE: DNA
; ORGANISM: Homo sap
US-10-474-794-231
                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                            뫄
                                               Ś
                                                                     밁
                                                                                 ঠ
                                                                                                     밁
                                                                                                                        S
                                                                                                                                             밁
                                                                                                                                                            á
                                                                                                                                                                                    문
                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 1195; Conserv
                                                                      821
                                                                                                                                                                  661
                                                                                                                                                                                     641
                                                                                                                                                                                                       601
                                                                                                                                                                                                                         581
                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                               521
                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                   461
                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                       401
                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                              341
                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                  281
                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                       221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                901
                                  188
                                                    841
                                                                                     781
                                                                                                           761
                                                                                                                                               701
                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ب
                                                                                                                                                                                    CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                            GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                         GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGGCAAGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGCCCTCGGCATCGGCTTCCAGTGGCCTCTTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCTCCCTGAGGGTCGTGGCGAGTTCGCGG
    ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                         ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                   CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                           | CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                   GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTTCTAGCAGC
                                                                                                                     GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                               TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  84.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              띪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                        660
                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                      900
                                                                                                             820
                                                                                                                                                  760
                                                                                                                                                                 720
                                                                                                                                                                                       700
                                                                                                                                                                                                                           640
                                                                                                                                                                                                                                                                 580
                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                     520
                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                          460
                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                              400
                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100
                 960
                                    940
                                                                        880
                                                                                         840
                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

Qy  121 GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC 180	Query Match B4.4%; Score 1193.8; DB 9; Length 5540; Best Local Similarity 99.8%; Pred. No. 0; Matches 1195; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  Qy 1 AGGACCCGCGAGGAAGGGCCCGCGGATGGCCCCTGAGGGTCGTGGCGAGTTCGCGG 60	PRIOR FILING DATE: 2000-08-02 PRIOR APPLICATION NUMBER: 60/224,360 PRIOR APPLICATION NUMBER: 60/224,360 PRIOR APPLICATION NUMBER: 60/282,850 PRIOR FILING DATE: 2000-04-11 NUMBER OF SEQ ID NOS: 358 SOFTWARE: FASTSEQ for Windows Version 3.0 SEQ ID NO 176 LENGTH: 5540 TYPE: DNA ORGANISM: Homo sapiens US-10-979-159-176	RESULT 9 US-10-979-159-176  Sequence 176, Application US/10979159  Publication No. US20050142138A1  GENERAL INFORMATION: APPLICANT: Brad St. Croix APPLICANT: Bert Vogelstein APPLICANT: Kenneth Kinzler TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS FILE REFERENCE: 1107.00134  CURRENT FILING DATE: 2004-11-03  PRIOR APPLICATION NUMBER: US/10/979,159  CURRENT FILING DATE: 2004-08-01  PRIOR APPLICATION NUMBER: US/09/918,715  PRIOR APPLICATION NUMBER: US/09/918,715	Oy 1141 CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197	Oy  1021 CTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC 1080	Db 941 ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT 1000  Qy 961 AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT 1020
RESULT 10  US-10-99-159-231  i Sequence 231, Application US/10979159  publication No. US20050142138A1  GENERAL INFORMATION:  APPLICANT: Brad St. Croix  APPLICANT: Brad St. Croix  APPLICANT: Kenneth Kinzler  TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS  FILE REFERENCE: 1107.00134  CURRENT APPLICATION NUMBER: US/10/979,159  CURRENT FILING DATE: 2001-08-01  prior FILING DATE: 2001-08-01	OY 1021 CTCCAGTICTGTCATCACCACACACTGTTC GACGGTCCATCCTGCCCATCCTGCCATCCTGTCATCCTGTCATCATCACCACACACTGTTCTGACGGTTCCATCCTGCCATCCTGTCATCATCACCACACACA	841 CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC	Qy 601 TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTCAATGACAC 660	QY 541 TGCTTTGACTGATGGAGAGACTCCATGAAGATCTCTTTTTCTATTCAGAGAGAG	Oy  421 AGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACCTTACATGCATG	Db 341 GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC 400  Oy 361 CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAAAATCCGTCAAGGCCT 420

```
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOPTWARE: FASCSEQ for Windows Version 3.
SEQ ID NO 231
LENGTH: 5540
TYPE: DNA
ORGANISM: Homo sapiens
US-10-979-159-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 84.4%;
Best Local Similarity 99.8%;
Matches 1195; Conservative
                                                                                                                                                                       581
                                                                                                                                                                                           541
                                                                                                                                                                                                                 521
                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                            461
                                                                                                                                                                                                                                                                                                     401
                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                341
                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                          281
                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                    221
                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                           721
                                                                                                      661
                                                                                                                            641
                                                                                                                                                109
                                                                                                                                                                                                                                                                                421
                                                                                 701
821
                   781
                                        761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                             GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTTATTGTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                       CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGGCAAGGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                          CTTCATTTTGGACAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
            GGCTCTGCAAGGCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                              ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                         TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                     GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                  ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                             ; Score 1193.8; pred. No. 0; O; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>.</u>
                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                 300
                    840
                                                                                   760
                                                                                                         720
                                                                                                                              700
                                                                                                                                                 660
                                                                                                                                                                       640
                                                                                                                                                                                                                  580
                                                                                                                                                                                                                                                            520
                                                                                                                                                                                                                                                                                                        460
                                                                                                                                                                                                                                                                                                                                                   400
                                                                                                                                                                                                                                                                                                                                                                                           340
                                                                                                                                                                                                                                                                                                                                                                                                                                      280
                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
 880
                                          820
                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
US-11-047-278-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
             ঠ
                                       밁
                                                              S
                                                                                  밁
                                                                                                                             밁
                                                                                                                                             5
                                                                                                                                                                        Query Match
Best Local Similarity
Matches 1195; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1001
               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          188
                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                               121
                                                                                    101
                                                                                                         61
                                                                                                                              41
                                                                                                                                                                         Conservative
                                                                                                                                                                                 84.4%;
```

```
CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                    ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCCAGCGCCTATCTT
                                             1140
                                                           1120
                                                                          1080
                                                                                         1060
                                                                                                        1020
                                                                                                                      1000
                               1180
                                                                                                                                                    940
                                                                                                                                    960
```

US-11-047-278-5

Sequence 5, Application US/11047278

Publication No. US20050196407A1

GENERAL INFORMATION:

APPLICANT: Young, John A.T.

APPLICANT: Bradley, Kenneth A.

APPLICANT: Mogridge, Jeremy S.

TITLS OF INVENTION: Anthrax Toxin Receptor

FILE REFERENCE: 960296.97745

CURRENT APPLICATION NUMBER: US/01/047,278

CURRENT FILING DATE: 2005-01-31

PRIOR APPLICATION NUMBER: US/970,076

PRIOR APPLICATION NUMBER: 60/251,481

PRIOR APPLICATION NUMBER: 60/251,481

PRIOR FILING DATE: 2000-12-05

NUMBER OF SEQ ID NOS: 10

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 5

LENGTH: 5540

TYPE: DNA

ORGANISM: Homo Sapiens

FAATURE:

NAME/KEY: CDS

LOCATION: (144)..(1835)

US-11-047-278-5

221 AGCGTGGGAAGGAGCCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG CGGGCAAGGGGACGCAGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA CGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA Score 1193.8; Pred. No. 0; 0; Mismatches 0, 2; Indels <u>,,</u> Gaps 120 60 240 220 180 100 160 0

DB 10;

Length

5540;

밁 र् 밁 र् 밁 5 밁 ş 밁 र् 문 ঠ 밁 S 밁 á 밁 δ 밁 Ś 밁 á 밁 ş

ક 밁 र्

밁

```
RESULT 12
US-11-047-278-7
JS-quence 7, Application US/11047278
Publication No. US20050196407A1
GENERAL INFORMATION:
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                        음 성 음 성
                                                                                                                                                                           밁
                                                                                                                                                                                        ð 유
                                                                                                                                                                                                                        중 음 중 음
                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                         Б
                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                          ф
                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                         유성
                                                                                                                                                                                                                                                                                                                                                                                                          음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                            유
                                                                                                           1121
                                                                                          1141
                                                                            1181
                                                                                                                                            1061
                                                                                                                                                            1021
                                                                                                                                                                             1001
                                                                                                                                                                                                                                                                                                                                                                                                             581
                                                                                                                                                                                            961
                                                                                                                                                                                                             941
                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                             881
                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                              821
                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                              761
                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                               701
                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                               641
                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                              521
                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                           AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                       TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                              CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCTGGTGGTTCTGGCCCCCTCTG
                                                                                                                                                                                                              ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                      ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                              CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                      CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                               TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                               CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGACAAATCCGTCAAGGCCT
                                                                                                             CIG
                                                                            1237
                                                                                          1197
                                                                                                                           1140
                                                                                                             1180
                                                                                                                                            1120
                                                                                                                                                            1080
                                                                                                                                                                             1060
                                                                                                                                                                                                              1000
                                                                                                                                                                                                                             960
                                                                                                                                                                                                                                             940
                                                                                                                                                                                                                                                                              880
                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                820
                                                                                                                                                                                                                                                                                                                                               760
                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                700
                                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                               640
                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                               580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 340
                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296, 97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR FILING DATE: 2001-10-03
PRIOR FILING DATE: 2001-10-03
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 7
LENGTH: 2112
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (113)..(1111)
US-11-047-278-7
                                                                                                                                                      Ś
                                                                                                                                                                            밁
                                                                                                                                                                                        S
                                                                                                                                                                                                        밁
                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                           유 성
                      ð
                                      뭥
                                                       δ
                                                                       밁
                                                                                    5
                                                                                                       문
                                                                                                                     5
                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 1053; Conserv
                                                                                                                                                                             370
                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                               190
                                                                                                             490
                                                                                                                            481
                                                                                                                                            430
                                                                                                                                                            421
                                                                                                                                                                                             361
                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                10
                                                                                                                                                                                                                                                                                                                                                                                               ш
                                                                                                                                                                                                            CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                               AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                           CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                       CGGGCAAGGGGACGCACGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                               AGGACCCGCGAGGAAGGGCCCGCGGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
            ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                    ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                            TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGAAAGATTTCAATGAGAC
                                                    CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                               CGGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                               74.4%; ilarity 99.9%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                               Score 1052.4;
Pred. No. 1.6e-
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                       .4; DB 10;
.6e-279;
                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                2112;
```

300

249

189

180

129

120

69

609

669

540

```
RESULT 13
US-09-796-753-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ई
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 11, Application US/09796753 Publication No. US20030027998A1 GENERAL INFORMATION:
    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/796,753
CURRENT FILING DATE: 2001-03
PRIOR APPLICATION NUMBER: 09/183,175
PRIOR FILING DATE: 1998-10-30
PRIOR FILING DATE: 1998-10-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: McCarthy, Sean A.
TITLE OF INVENTION: SECRETED PROTEINS AND USES
FILE REFERENCE: 7853-227-999
                                                                                                                                                                                                                                                                                                    OR APPLICATION NUMBER: 09/223,546
OR FILING DATE: 1998-12-30
OR APPLICATION NUMBER: 09/224,246
OR FILING DATE: 1998-12-30
OR APPLICATION NUMBER: 09/259,388
OR FILING DATE: 1999-02-26
OR APPLICATION NUMBER: 60/122,458
OR FILING DATE: 1999-03-01
OR APPLICATION NUMBER: 09/312,359
OR FILING DATE: 1999-05-14
OR APPLICATION NUMBER: 09/316,356
OR FILING DATE: 1999-06-18
OR APPLICATION NUMBER: 09/442,687
OR APPLICATION NUMBER: 09/445,687
OR FILING DATE: 1999-06-29
OR APPLICATION NUMBER: 09/445,687
OR FILING DATE: 1999-06-29
R APPLICATION NUMBER:
R FILING DATE: 2000-02
R APPLICATION NUMBER:
R FILING DATE: 2000-03
R APPLICATION NUMBER:
R FILING DATE: 2000-05
                                                                                                                                                                                                                                          R APPLICATION NUMBER:
R FILING DATE: 1999-06
R APPLICATION NUMBER:
R FILING DATE: 1999-07
                                                                                APPLICATION NUMBER: 09/474,072
FILING DATE: 1999-12-20
APPLICATION 1999-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 09/223,094 FILING DATE: 1998-12-30
                                                                                                                                   FILING DATE: 1999-09-30
APPLICATION NUMBER: 09/471,179
FILING DATE: 1999-12-23
APPLICATION NUMBER: 09/474,071
                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 1999-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCAGTTCTGTCATCATCACCACCACACACTGT 1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGACATGCCCGCAACGTGGACAGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCAGTTCTGTCATCATCACCACCACACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
               E: 2000-03-01
                                                                                                                                                                                                                                                                            1999-06-30
                                                                                                                                                                                                               1999-09-20
                                                                                                                                                                                                                                              1999-07-30
                                                             2000-02-25
                                                                             09/514,010
                                                                                                                                                                                                   09/409,634
                                                                                                                                                                                                                               09/399,723
                                                                                                                                                                                                                                                                                            09/345,464
                   09/572,002
                                                                                                                                                                                                                                                             09/365,164
                                               09/516,745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; NUMBER OF SEQ ID NOS: 162; SEQ ID NO 11
; LENGTH: 2272
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (213)...(1211)
US-09-796-753-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 09/597,993
PRIOR FILING DATE: 2000-06-19
PRIOR PELICATION NUMBER: 09/599,596
PRIOR APPLICATION NUMBER: 09/639,596
PRIOR APPLICATION NUMBER: 09/630,334
PRIOR APPLICATION NUMBER: 09/606,334
PRIOR PILING DATE: 2000-07-31
PRIOR PPLICATION NUMBER: 09/606,565
PRIOR FILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: 09/606,317
PRIOR APPLICATION NUMBER: 09/665,666
PRIOR APPLICATION NUMBER: 09/665,666
PRIOR FILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-06-29
PRIOR FILING DATE: 2000-06-29
PRIOR FILING DATE: 2000-09-20
                                  밁
                                                             δ
                                                                                                                   S
                                                                                                                                                      밁
                                                                                                                                                                                 S
                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 1053; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 09/665,666 FILING DATE: 2000-09-20 APPLICATION NUMBER: 09/677,751 FILING DATE: 2000-09-30
                                                                                                                                                         590
                                                                                                                                                                                        481
                                                                                                                                                                                                                    530
                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                 470
                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                           410
                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                        350
                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    110
                                                                 601
                                                                                               650
                                                                                                                           541
       661
                                  710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
      ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                           CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                              GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                       CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGGGCAAGGGGAGGATTTGACCTGTACGGCGGGGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCGTGGGAAGGAGCGCTGCTCCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCGTGGGAAGGAGCCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGACCCGCGAGGAAGGGCCCGCGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGACCCGCGAGGAAGGACCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGG
                                                                                                                                                                                                                                                                                 CACCCGAGGAACAACCTTAATGAAACTGACAGAAGAACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                             GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                     TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74.4%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1052.4; DB 3
Pred. No. 1.7e-279;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2272;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       169
                                                                                                                              600
                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                           409
                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                  709
                                                                                                                                                             649
                                                                                                                                                                                         540
                                                                                                                                                                                                                         589
                                                                                                                                                                                                                                                                                  529
                                                                                                                                                                                                                                                                                                                                              469
                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

```
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Con
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 2272
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (213)...(1211)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 14
US-10-038-307-1
(Sequence 1, Application US/10038307
Publication No. US20030134786A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
     S
                                                      á
                                                                                      밁
                                                                                                              á
                                                                                                                                            밁
                                                                                                                                                                  Ś
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                               밁
                                                                                                                                                                                                                                                                                                              US-10-038-307-1
                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 99.9
Matches 1053; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1010
                                 290
                                                          181
                                                                                      230
                                                                                                               121
                                                                                                                                            170
                                                                                                                                                                                                   110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             770
                                                                                                                                                                      61
                                                                                                                                                                                                GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                             AGCGTGGGAAGGAGCGGACCCTGCTCCCCCGGGCTGCGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCCAGTTCTGTCATCATCACCACCACACACTGT 1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCTCTGCAAGGCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                      GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT 1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACCGCTT
     CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                CGGGCAAGGGGGACGCAGGGAAGGATGGGGGGTCCAGCCTACGGCGATTTGACCTGTA 240
                                                                                                                                            AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGCCATGGCCACGGCGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCCAGTTCTGTCATCATCACCACACACACTGT 1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT 1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC 1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                   74.48;
                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                     Score 1052.4; DB 6; Length 2272; Pred. No. 1.7e-279; O; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and
                                                                                                                                                                                                                                                      Gaps
                                 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                 180
                                                                                                                                                                      120
                                                                                                                                                                                                 169
                                                                                                                                                                                                                             6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             829
                                                                                      289
                                                                                                                                            229
GENERAL INFORMATION:

APPLICANT: James B. ROTTMAN

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Engin OZKAYNAK

APPLICANT: Judith J. HEALEY

ITITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Met.

FILE REFERENCE: 7853-253-999

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT FILING DATE: 2003-02-14

NUMBER OF SEQ ID NOS: 36

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 1

LENGTH: 2272
                                                                                                                                                                                                              RESULT 15
US-10-201-292-1
                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭉
                                                                                                                                                                                  Sequence 1, Application US/10201292 Publication No. US20030144193A1
                                                                                                                                                                                                                                                                      1130
                                                                                                                                                                                                                                                                                                                        1070
                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                                                                                                                                                                                1010
                                                                                                                                                                                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                       950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             350
                                                                                                                                                                                                                                                                                     CTCCAGTTCTGTCATCATCACCACCACACACTGT 1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                           AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCAGTTCTCATCATCACCACCACACACTGT
                                                                                                                                                                                                                                                                                                                           AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                       CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                      1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : 360
                                                                                                                                                                                                                                                                                                                                                                                1069
                                                                                                                                                                                                                                                                                                                             1129
                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                       1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         469
```

```
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (213)...(1211)
US-10-201-292-1
                                                                                                                              음 성
                                                                                                                                                    유
                                                                                                                                                                             밁
                                                                                                                                                                                       δ
                                                                                                                                                                                                     밁
                                                                                                                                                                                                             ક
                                                                                                                                                                                                                          몽
                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                  ક
                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                       Ś
                                                             음 성
                                                                                             á
                밁
                         문
                                                                                                                                                                                                                                                                                                                                                                   Query Match 74.4%;
Best Local Similarity 99.9%;
Matches 1053; Conservative
                                                                                                                                                                   481
                                                                                                                                                                               530
                                                                                                                                                                                          421
                                                                                                                                                                                                                                                  350
                                                                                                                                                                                                                                                             241
                                                                                                                                            541
                                                                                                                                                         590
                                                                                                                                                                                                      470
                                                                                                                                                                                                                 361
                                                                                                                                                                                                                            410
                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                         290
                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                230
                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                       170
                                                                                                                                                                                                                                                                                                                                              110
                                                                                                                     109
                                                                                                                                 650
                                                  781
                                                                        721
                                                                                     770
                                                                                               199
                                                                                                          710
      901
                 950
                            841
                                       890
                                                              830
                                                                                                                                                                                                                                                                                                                                  13
                                                                                                                                                                                                                                                                                                                                             CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                           CGGCCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                      GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                      AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAGCG
                                                                                                                                                        GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTTTTGGCCACTCTGGTGCTCATCTGCGC
                                                              ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCCTATCTT
                CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC 900
                                      ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCA 720
                                                                                     ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                   Score 1052.4; DB 6; Length Pred. No. 1.7e-279; O; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                2272;
                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                            769
                                                                                                                       660
                                                                                                                                                                    540
                                                                                                                                                                                           480
                                                                                                                                                                                                                 420
                                                                                                                                                                                                                             469
                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                    409
                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                          349
                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                 289
                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                        229
                                                                                                                                                                                                                                                                                                                                              169
                  1009
                                                   840
                                                               889
                                                                          780
                                                                                     829
                                                                                                                                                         649
                                                                                                                                                                                589
                                                                                                                                                                                                      529
                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                         60
                                        949
```

Search completed: December 17, 2005, 18:47:10 Job time : 1305.57 secs

THIS PAGE BLANK (USPTO)

```
Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Databage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                      Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Acore greater than or equal to the score and is derived by analysis of the total
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
                                     444.
68.
44.
                                                                                                                                                                                                                                                                                                   seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleic search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Published_Applications_NA_New:*

1: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

2: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

5: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*

7: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

8: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

10: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq3:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         December 17, 2005, 13:29:40 ; Search time 256.631 Seconds (without alignments) 2700.811 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               is the number of results predicted by chance to have a ster than or equal to the score of the result being printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4161431 seqs, 245089505 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IDENTITY_NUC Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-1
1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenCore version
Copyright (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                     588
305312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
          2464
2463
2036
2036
2094
2094
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
11626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2765
2126
2173
2773
2276
2487
2487
1672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB
                                     US-11-186-284-198
US-10-750-185-2575
US-10-689-742-43
US-10-689-742-165
US-10-689-742-165
US-10-689-742-165
US-10-689-742-17
US-10-689-742-11
US-10-995-561-13236
US-11-102-240-53
US-11-102-280-33
US-10-996-2177-8
US-10-96-2177-8
US-10-96-2177-8
US-10-96-2177-8
US-10-131-826A-345
US-11-102-83A-12
US-11-102-83A-165
US-11-102-240-69
US-11-102-240-69
US-11-102-240-143
US-11-053-185-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bummaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₩8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       score distribution
Sequence 198, App
Sequence 25275, A
Sequence 809, Appl
Sequence 43, Appl
Sequence 165, Appl
Sequence 157, Appl
Sequence 17, Appl
Sequence 41, Appl
Sequence 41, Appl
Sequence 33, Appl
Sequence 34, Appl
Sequence 34, Appl
Sequence 37, Appl
Sequence 77, Appl
Sequence 137, Appl
Sequence 137, Appl
Sequence 127, Appl
Sequence 148, Appl
Sequence 149, Appl
Sequence 15, Appl
Sequence 15, Appl
Sequence 165, Appl
Sequence 17, Appl
Sequence 189, Appl
Sequence 199, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Description
```

			٠.		•	w	w	L	w	C L		w	w	w	(LI)	N	N	N	N	N	
5	4	ū	N	Ξ	ō	39	8	7	5	ű	4	ū	ວ	Ξ	30	9	æ	7	9	ທັ	
42.8	42.8	42.8	42.8	42.8	42.8	4.	4.3	43	4.	43.2	43.2	43.2	43.2	43.6	43.6	43.6	43.6	43.6	43.6	43.8	
_	Ψ.	_	_	_	_	_	_	_	_					•	•			-	•	_	
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3 1	3. <sub>1</sub>	3.1	3 1	
645179	1624	151	120	31	20:	169047	167	1510	496	170189	157224	2668	1690	247	2476	213	157	1073	485	1904	
9	4	9	4	<u>_</u>	7	7	4	•	ō	ق د	-1	8	õ	9	6	4	ω G	ω -1	رن در	4	
٠,	~	٥,	٠,	-	٥,	۷.	٠. ح	٥,	٠.	~	-	٥.	~ C		<u>.</u>	٠. د:	٠.	~ ~		о. С	
US-10-995-561-13293	JS-10-131-826A-181	JS-10-955-054A-181	JS-10-131-826A-505	/S-11-123-896-361	IS-10-995-561-46434	IS-11-121-086-15	IS-10-131-826A-453	IS-10-131-826A-399	IS-10-131-826A-533	IS-11-112-908-50	IS-11-112-908-51	US-10-131-826A-511	/S-11-090-439-43	US-10-955-054A-50	US-10-131-826A-489	JS-10-750-185-58717	US-10-689-742-187	S-11-102-240-95	US-11-102-240-43	US-10-131-826A-99	
Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	
13293, 7	181, App		505, App	361, App	4	15, App1	453, App				51, App1			50, Appl	~	т,	187, App	95, App1	•	•	

## ALIGNMENTS

```
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: MOYEL GENES, COMPOSITIONS, KITS,
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASS
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPMO1-029PENM
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
PRIOR APPLICATION NUMBER: US 60/39,971
PRIOR APPLICATION NUMBER: US 60/39,971
PRIOR APPLICATION NUMBER: US 60/39,971
PRIOR APPLICATION NUMBER: US 60/381,978
PRIOR APPLICATION NUMBER: US 60/361,978
밁
                                                     Ś
                                                                                                                                                                                                                                         US-11-186-284-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-11-186-284-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals,
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 198, Appublication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows Version SEQ ID NO 198
                                                                                                                    Matches 1195;
                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                            LENGTH: 5540
TYPE: DNA
ORGANISM: Homo Sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (144)...(1838)
   41
                                               AGGACCCGCGAGGAAGGGCCCGCGGATGGCGCGTCCCTGAGGGTCGTGGCGAGTTTCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/11186284
o. US20050266493A1
                                                                                                                       Conservative
                                                                                                                                                 84.4%;
99.8%;
                                                                                                                    Score 1193.8; DB 7; Pred. No. 3.3e-294; 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KITS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ASSESSMENT,
                                                                                                                                                                                   Length
                                                                                                                                                                                   5540;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PREVENTION,
                                                                                                                           0,
                                                                                                                           Gaps
            100
                                                                     60
                                                                                                                           0
```

유

```
°.==
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6
                                   1121
 1141
                                                                                                         1061
                                                                                                                                        1021
                                                                                                                                                                           1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                 941
                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                     881
                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                           821
                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                          CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGCCCTCGGCATCGGCTTCCAGTGGCCTCTCTTTGGCCACTCTGGTGCTCATCTGCGC
                                                                                                                               CTCCAGTTCTGTCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGC 1080
                                                                                                                                                                                               AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTAT 1020
                                                                                                                                                                                                                                                                     ACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGTGTGAAAGATTTTCAATGAGAC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTA
CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1197
                                                                    CCTGCTGATCCTGCTCCTAGCCCTGGCTCTCTCTGGTGGTTCTGGCCCCTCTG 1140
                                                                                                         CTCCAGTTCTGTCATCATCACCACCACACTGTTCTGACGGTTCCATCCTGGCCATCGC 1120
                                                                                                                                                                           AAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTAT
                                                                                                                                                                                                                                               ACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTT
                                                                                                                                                                                                                                                                                                                       CCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                             TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                  TGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGAGGAAACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGTGGAAAGATTTCAATGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGAAGGCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAGCG
                                                                                                                                                                                                                                                 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                           1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                     940
                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                             880
                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
```

성 음

밁 S 밁 Ś 밁 δ 밁 á В S 밁 Ş 밁 á 밁 á 밁 S В

S

**∂** ₿

Ś

```
Sequence 25275, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
APPLICANT: MMI GENOMICS, INC.
APPLICANT: DeNISE, Sue K.
APPLICANT: ROSENFELD, David
APPLICANT: HOLM, Tom
APPLICANT: HOLM, Tom
APPLICANT: HOLM, Tom
APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOV
FILE REFERENCE: MMI1100-2
CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT APPLICATION NUMBER: US 60/437,482
PRIOR APPLICATION UMBER: US 60/437,482
PRIOR FILING DATE: 2002-12-31
NUMBER OF SEQ ID NOS: 64922
SOFTWARE: PatentIN version 3.1
SEQ ID NO 25275
LENGTH: 2765
TYPE: DNA
ORGANISM: Bovine 19866881163262
APPLICANT: Jain, Ravi
APPLICANT: Bhat, Balkrishen
APPLICANT: Peralta, Bigen
TITLE OF INVENTION: 01190meric Compounds And Compositions For
TITLE OF INVENTION: 0f Small Non-Coding RNAs
FILE REFERENCE: ISISO080-100 (CORBO01605)
CURRENT APPLICATION NUMBER: US/10/909,125
CURRENT FILING DATE: 2004-07-30
PRIOR APPLICATION NUMBER: US 60/492,056
PRIOR FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: US 60/516,303
PRIOR APPLICATION NUMBER: US 60/516,303
PRIOR APPLICATION NUMBER: US 60/531,596
PRIOR FILING DATE: 2003-10-31
PRIOR APPLICATION NUMBER: US 60/531,596
PRIOR FILING DATE: 2003-12-19
PRIOR APPLICATION NUMBER: US 60/531,596
PRIOR PILING DATE: 2003-12-19
PRIOR APPLICATION NUMBER: US 60/531,596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 809, Applicat publication No. US2005 GENERAL INFORMATION: GENERAL CANT: Esau, Chri APPLICANT: Lollo, B. APPLICANT: Bennett, APPLICANT: Freier, APPLICANT: Griffey, APPLICANT: Griffey, APPLICANT: Wickers, APPLICANT: Vickers, APPLICANT: Vic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 2
US-10-750-185-25275/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-909-125-809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    733 CATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCAC 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bennett, C. Frank
Freier, Susan M.
Griffey, Richard H.
Baker, Brenda F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGA 827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAGA 1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Marcusson, Eric (
Koller, Erich
Swayze, Eric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATATGTGCAGGAGGTAAATTGAAACTAAGTGTTA 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTCTCCTCCTAGATATTGAAGAAATCCTGCATCGAAATTCTAGCAGCTGAACCATCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vickers, Timothy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lollo, Bridget
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/10909125
o. US20050261218A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Christine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 61.4; DB 6;
Pred. No. 8.1e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BOVINE TRAITS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2765;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     For Use In Modulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

Gerritsen, Mary E

```
ঠ
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 2773
TYPE: DNA
ORGANISM: Homo sapiens
US-10-689-742-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-689-742-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-909-125-809
                                                                                                                                    US-10-131-826A-9
                                                                                                                                                        RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2004-04-14
NUMBER OF SEQ ID NOS: 2184
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 809
LENGTH: 2126
TYPE: DNA
ORGANISM: H. sapiens
                                                                                Sequence 9, Application US/10131826A Publication No. US20050245730A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 43, Application US/10689742 Publication No. US20050250180A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                             Best Local Similarity Matches 69; Conserv
                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Merberg, David
APPLICANT: Treacy, Maurice
APPLICANT: Spaulding, Vikri
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM
FILE REFERENCE: 00766.000091.10
CURRENT APPLICATION NUMBER: US/10/689,742
CURRENT FILING DATE: 2003-10-22
PRIOR APPLICATION NUMBER: 09/746,783
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ. ID NOS: 231
NUMBER OF SEQ. ID NOS: 231
                                APPLICANT: Baker, Kevin P. APPLICANT: Beresini, Maure APPLICANT: DeForge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Jacobs, Kenneth APPLICANT: McCoy, John M APPLICANT: LaVallie, Edward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1305 ATCTAGACAGTCTTTTCCTCTAGTTCCCTGTATTCAAATCCCAGTGTCTAACATTCAATA 1364
                                                                                                                                                                                                                                        1373 ТАТGAPATCAPAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1414
                                                                                                                                                                                                                                                                                                           75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTTTCAGAGACATTTGCTCTAGTATGGTGTATTTAAATAATAAAAAACTTAAAAGAAAAA
Beregini, Maureen
DeForge, Laura
Desnoyers, Luc
Filvaroff, Ellen
                                                                                                                                                                                                                                                                         AGTGCTTTGGTGTATTGAGCCTCAGTACACTCCAAGGGCATTAAAGTCAAGAACTAGAAC 2690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Racie, Lisa A
Evans, Cheryl
                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                               3.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             68.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                             Score 49.2; DB 6;
Pred. No. 0.01;
0; Mismatches 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 54; DB 6; Length 2126; Pred. No. 0.00054;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         35,
                                                                                                                                                                                                                                                                                                                                                33;
                                                                                                                                                                                                                                                                                                                                                                               Length 2773;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
```

```
5
                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-131-826A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
PRIOR FILING DATE: 1997-09-17
PRIOR FILING DATE: 1997-09-17
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059122
PRIOR APPLICATION NUMBER: 60/059122
PRIOR APPLICATION NUMBER: 60/059122
PRIOR APPLICATION NUMBER: 60/059184
PRIOR APPLICATION NUMBER: 60/059184
PRIOR APPLICATION NUMBER: 60/059184
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059184
PRIOR APPLICATION NUMBER: 60/059184
PRIOR FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT: Merberg, David
APPLICANT: Treacy, Maurice
APPLICANT: Spaulding, Vikki
APPLICANT: Spaulding, Vikki
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM
FILE REFERENCE: 00766.000091.10
CURRENT APPLICATION NUMBER: US/10/689,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Remaining Prior Application NUMBER OF SEQ ID NOS: 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/131,826A CURRENT FILING DATE: 2002-04-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 2276
TYPE: DNA
ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/059263
FILING DATE: 1997-09-18
APPLICATION NUMBER: 60/059352
FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/059588 FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                           69;
                                                                                                                                                                                                                                                                                                                                          Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stewart, Timothy A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Watanabe, Colin K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tumas,Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Godowski,Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goddard, Audrey
                                                                                                                                                                                                                       Application US/10689742
o. US20050250180A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   data removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 48.6; DB Pred. No. 0.013; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 2276;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AND NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

```
RESULT 8
US-11-102-240-17
; Sequence 17, Application US/11102240
; Publication No. US20050260647A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA; ORGANISM: Homo sapiens US-10-689-742-165
                                                                                                                                                                      S
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-689-742-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-689-742-5
                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/689,742
CURRENT FILING DATE: 2003-10-22
PRIOR APPLICATION NUMBER: 09/746,783
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 231
SOFTWARE: PATENTIN VERSION 3.2
SEQ ID NO 5
LENGTH: 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.2
SEQ ID NO 165
LENGTH: 2487
                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 55; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.4%;
Best Local Similarity 58.7%;
Matches 84; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 5, Application US/10689742 Publication No. US20050250180A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Jacobs, Kenneth
APPLICANT: McCoy, John M
APPLICANT: LaVallie, Edward R
APPLICANT: Racie, Lisa A
APPLICANT: Evans, Cheryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Merberg, David
APPLICANT: Treacy, Maurice
APPLICANT: Spaulding, Vikki
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM
FILE REFERENCE: 00766.000091.10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 2003-10-22
PRIOR APPLICATION NUMBER: 09/746,783
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2411
                                                                                                                                                                                                                                     1407 AAAAAAAA 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2291 ATGTTTTAAATGGCGATTAAAATACTCTGCTGTATATAGTAGTTTTTTGAGTAAATATTTG 2350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1272 ATTTTATACAATGCTCTGAAAATCATAGTCTCAATCTAGACAGTCTTTTCCTCTAGTTCC 1331
                                                                                                                                                                                                              819 ААТСССТАЛААТGСААТАААААСТАGТАТGTTTTCAAAAAAAAAAAAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAAAAAAAAAAAAAAAAAA 2433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAAAAAA 886
                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                        3.3%;
                                                                                                                                                                                                                                                                                    Score 47.2; DB 6; Length 894; Pred. No. 0.019; O; Mismatches 13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 48.6; DB 6; Length 2487; Pred. No. 0.014; 0; Mismatches 59; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>.</u>
                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

```
GENERAL INFORMATION:

APPLICANT: Jacobs, Kenneth
APPLICANT: McCoy, John M
APPLICANT: LaVallie, Edward R
APPLICANT: Racie, Lisa A
APPLICANT: Evans, Cheryl
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 9
US-10-689-742-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                         US-10-689-742-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-11-102-240-17
                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Merberg, David
APPLICANT: Treacy, Maurice
APPLICANT: Spaulding, Vikki
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM
FILE REFERENCE: 00766.00091.10
CURRENT APPLICATION NUMBER: US/10/689,742
CURRENT FILING DATE: 2003-10-22
PRIOR APPLICATION NUMBER: 09/746,783
PRIOR APPLICATION NUMBER: 09/746,783
PRIOR APPLICATION NUMBER: 09/746,783
SOFTWARE: Patentin version 3.2
SOFTWARE: Patentin version 3.2
SEQ ID NO 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 3.3%;
Best Local Similarity 81.8%;
Matches 54; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 170
SEQ ID NO 17
                                                                                                                                 Matches 112;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 41, Application US/10689742
Publication No. US20050250180A1
                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: ANTIBODIES TO POLYPEPTIDES ENCODED BY A NUCLEIC ACID UNDEREXPRESS TITLE OF INVENTION: ESOPHAGEAL TUMOR FILE REFERENCE: 9330R1C106C CURRENT APPLICATION NUMBER: US/11/102,240 CURRENT FILING DATE: 2005-04-08 PRIOR APPLICATION NUMBER: 10/063662 PRIOR APPLICATION NUMBER: 10/063662 PRIOR FILING DATE: 2002-05-07 PRIOR FILING DATE: 2002-05-07 PRIOR FILING DATE: 2001-12-06 PRIOR APPLICATION NUMBER: POWER PRIOR APPLICATION NUMBER: POWER PRIOR APPLICATION NUMBER: 00/170262 PRIOR APPLICATION NUMBER: 60/170262 PRIOR APPLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Goddard, Audrey APPLICANT: Godowski, Paul APPLICANT: Grimaldi, Chri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                     LENGTH: 588
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 1672
TYPE: DNA
ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1648 AAAAAA 1653
                                                         <u>ÄÄTCTÄGTTGÄGÄÄAAÄGÄÄAGÄÄAGCCAAGAAGGCTAATCACAAGGGTTCTGAAAATAAA</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAAA 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gurney, Austin L. Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                 Conservative
                                                                                                                                                             3.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٥,
                                                                                                                             Score 46.6; DB 6;
Pred. No. 0.022;
0; Mismatches 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 46.8; DB
Pred. No. 0.033;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 7; Length 1672;
                                                                                                                                 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12;
                                                                                                                                                                                                 Length 588;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                 0,
                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

```
Sequence 13236, Application US/1099561

Publication No. US20050272054A1

GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENERIC FOLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: DETECTION AND USES THEREOF

FILE REFERENCE: CL001559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT APPLICATION NUMBER: US/10/995,561
NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 13236
LENGTH: 305312
RESULT 11

US-11-102-240-55

Sequence 55, Application US/11102240

Publication No. US20050260647A1

GENERAL INFORMATION:
GADPLICANT: Goddowski, Paul J.
APPLICANT: Goddowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurmay, Austin L.
APPLICANT: Wood, William I.
APPLICANT: Wood, William I.
APPLICANT: Wood, William I.
FILE OF INVENTION: ANTIBODIES TO POLYPEPTIDES ENCODED BY A NUCLEIC ACID UNDEREXPRESS
TITLE OF INVENTION: ESOPHAGEAL TUMOR
FILE REFERENCE: P3230R1C106C
CURRENT APPLICATION NUMBER: US/11/102,240

CURRENT FILING DATE: 2005-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; NAME/KEY: misc_feature
; LCCATION: (1)...(305312)
; OTHER INFORMATION: n = A,T,C
US-10-995-561-13236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-995-561-13236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 10
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 110;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   140779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1199 АДАДТАЛЛАТАДСАДБАДБАДБАДБАДБАДБАДАТСССАСАБАЛАСАБАТЛАССТАДСАСА 1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1259 GCCCGTGCAACGTATTTTATACAATGCTCTGAAAATCATAGTCTCAATCTAGACAGTCTT 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACACAGCCCGTGCAACGTATTTTATACAATGCTCTGAAAATCATAGTCTCAATCTAGACA 1313
                                                                                                                                                                                                                                                                                                                                                                                                                       ÁCTGATTTAGATAATTCTATAGGAATTAAAAAATGAAAACCTCATGTAAATTTAAGATA
                                                                                                                                                                                                                                                                                                                                                                                АТСЛАЛЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛА 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ттсстстасттссстстаттсалатсссастсталасаттсааталалтасстататсаа 1378
                                                                                                                                                                                                                                                                                                                                         ATAMAATAAMATAAMATAAMATAAAATAAATAAA 140874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 50.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 46.4; DB 6;
Pred. No. 0.59;
D; Mismatches 106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or insertion/deletion polymorphism (see Tables
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               106; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 305312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESPONSE, METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        456
```

```
APPLICANT: Larsen, Glenn
APPLICANT: Marvin, Martha
APPLICANT: Li, Dean Y.
APPLICANT: Wang, Elizabeth
APPLICANT: Wang, Elizabeth
APPLICANT: Shamah, Steven M.
APPLICANTION: PROLIFERATION
FILLE REFERENCE: HYDR-P01-041
CURRENT APPLICATION NUMBER: US/11/108,528
CURRENT FILING DATE: 2005-04-18
PRIOR APPLICATION NUMBER: US 60/563,137
PRIOR FILING DATE: 2004-04-16
PRIOR APPLICATION NUMBER: US 60/598,368
PRIOR FILING DATE: 2004-08-02
NUMBER OF SEQ ID NOS: 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 12
US-11-108-528-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                        δ
                                                                 밁
                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-11-102-240-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; PRIOR APPLICATION NUMBER: 10/063662
; PRIOR FILING DATE: 2002-05-07
; PRIOR PPLICATION NUMBER: 10/006867
; PRIOR FILING DATE: 2001-12-06
; PRIOR APPLICATION NUMBER: PCT/US00/23328
; PRIOR APPLICATION NUMBER: 60/170262
; PRIOR FILING DATE: 109-12-09
; PRIOR FILING DATE: 199-12-09
; NUMBER OF SEQ ID NOS: 170
                                                                                                                                                                                                    US-11-108-528-3
                                                                                                                                                                                                                                                                    SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3, Application US/11108528 Publication No. US20050261189A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.2%;
Best Local Similarity 69.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 55
LENGTH: 644
                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Homo Sapien
                                                                                                                                                                                                                    LENGTH: 2463
TYPE: DNA
ORGANISM: Mouse
                     1386 АЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛА 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62;
                                                                                                                                             3.2%;
Similarity 68.5%;
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2420
                                                                   Conservative
                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٥,
                                                                                                                                   Score 45.6; DB 7;
Pred. No. 0.081;
0; Mismatches 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 45.8; DB Pred. No. 0.036;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CARDIAC
                                                                                                                                                                 DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 644;
                                                                                                                                                                    Length 2463;
                                                                                                                                      Indels
                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                      Gaps
                                                                      2388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                      0
```

US-10-909-125-801 ; Sequence 801, Application US/10909125 ; Publication No. US20050261218A1

RESULT 13

```
RESULT 14
US-10-996-217A-8/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: H. sapiens
US-10-909-125-801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                           ; OTHER INFORMATION: Synthetic Construct US-10-996-217A-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 60/492,056
PRIOR FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: US 60/516,303
PRIOR FILING DATE: 2003-10-31
PRIOR APPLICATION NUMBER: US 60/531,596
PRIOR FILING DATE: 2003-12-19
PRIOR APPLICATION NUMBER: US 60/562,417
PRIOR APPLICATION NUMBER: US 60/562,417
PRIOR FILING DATE: 2004-04-14
                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 8, Application US/10996217A Publication No. US20050266561A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 2184
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 801
                                                                                                                                        SOFTWARE: PatentIn version 3.2
SEQ ID NO 8
LENGTH: 2036
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local :
Query Match
Best Local Similarity
                                                                                                                                                                                                                                         APPLICANT: Revivicor, Inc.
APPLICANT: Wells, Kevin
APPLICANT: Wells, Kevin
TITLE OF INVENTION: Use of Interfering RNA in the Production of Transgenic Animals
FILE REFERENCE: 10785.105070 REV 1015 US
CURRENT APPLICATION NUMBER: US/10/996,217A
CURRENT FILING DATE: 2004-11-22
PRIOR APPLICATION NUMBER: 60/523,938
PRIOR APPLICATION NUMBER: 60/523,938
PRIOR FILING DATE: 2003-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Peralta, Eigen
TITLE OF INVENTION: Oligomeric Compounds And Compositions For Use In Modulation
TITLE OF INVENTION: Of Small Non-Coding RNAs
FILE REFERENCE: ISISO080-100 (CORE0016US)
CURRENT APPLICATION NUMBER: US/10/909,125
CURRENT FILING DATE: 2004-07-30
                                                                                                                                                                                                                     PRIOR FILING DATE: 2003-11-21
NUMBER OF SEQ ID NOS: 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                  ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 4339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1375 ТGAAATCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4155 TOTTTTACACGTTTAAAAACTTCTTAAAGCACTCTGTAATAATGATTAAATTGCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jain, Ravi
Bhat, Balkrishen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Marcusson, Eric G.
Koller, Erich
Swayze, Eric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Griffey, Richard H.
Baker, Brenda F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lollo, Bridget
Bennett, C. Frank
Freier, Susan M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vickers, Timothy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Christine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.2%;
3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
Score 45.2; DB 6; Pred. No. 0.093;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 45.6; DB Pred. No. 0.11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 4339;
                     Length 2036;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

```
FILE REFERENCE: DEX-0537
CURRENT APPLICATION NUMBER: US/11/077,386
CURRENT FILING DATE: 2005-03-10
PRIOR APPLICATION NUMBER: US 60/566,706
PRIOR APPLICATION NUMBER: US 60/565,144
PRIOR PILING DATE: 2004-04-23
PRIOR PILING DATE: 2004-04-23
PRIOR APPLICATION NUMBER: US 60/551,911
PRIOR APPLICATION NUMBER: US 60/551,911
PRIOR PILING DATE: 2004-03-10
NUMBER OF SEQ ID NOS: 54
SOFTWARB: Patentin version 3.1
SEQ ID NO 7
                                                   밁
                                                                                                                 ₽
                                                                                                                                                                                                                                                       ; LENGTH: 602
; TYPE: DNA
; ORGANISM: Homo sapien
US-11-077-386-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
US-11-077-386-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 7, Application US/11077386 Publication No. US20050272067A1
                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Macina, Roberto
APPLICANT: Turner, Leah R.
APPLICANT: Chen, Huei-Mei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Liu, Snu-Hui
TITLE OF INVENTION: Compositions, Splice Variants and Methods Relating to Cancer Spec
TITLE OF INVENTION: Genes and Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                1390 AAAAAAAAAAAAAAAAAAAAAAA 1414
                                                                                                                   447
                                                   507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              656 TTTTAGGATATTTTCTTGGTTTCCCTTCTCAGTGAAACTTATTTTTAGGTAATCTAAAAA 597
                                                                                                                                                                                       60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                65;
                                                   AAAAAAAAAAAAAAAAAAAAAA 531
                                                                                                                     АЛАТСАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛ 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rodriguez, Maria
                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shu-Hui
                                                                                                                                                                                                   3.2%;
2005, 18:54:52
                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>,</u>
                                                                                                                                                                                   Score 45; DB
Pred. No. 0.05
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                     DB 7;
0.056;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               33;
                                                                                                                                                                                       25;
                                                                                                                                                                                                                     Length 602
                                                                                                                                                                                       Indels
                                                                                                                                                                                       <u>.</u>.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                       Gaps
                                                                                                                       506
```

Search completed: December 17, Job time : 259.631 secs

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                    -Q#/Cgm2_1/USPTO_Bpool_p/US099709/Frunat_14122005_110510_26550/app_query.fasta_1.2894
-Q#/Cgm2_1/USPTO_Bpool_p/US09970076/runat_14122005_110510_26550/app_query.fasta_1.2894
-DB=Issued_Patents_AA -QFMT=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bite -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DCCALIGNE200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALICN=15
-MODD=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000
-USER=US09970076_0CGN 1 1 119_@runat_14122005_110510_26550 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQÜERY -NEG_SCORE=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -MARN_TIMEOUT=30 -THREADS=1 -KGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-DEV_TIMEOUT=17 -YGAPOP=10 -YGAPOP=10 -THREADS=1 -KGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -MODEL-frame+_n2p.model -DEV-xlp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                           Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        seq length: 0
seq length: 2000000000
   167
167
167
167
167
167
167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                        Query
Match
                                                                                                                                                                                                                                                                                                                    BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               572060 seqs, 82675679 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-1
2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        December 14, 2005, 11:21:18 ; Search time 46.6092 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Maximum Match 100%
Listing first 45 su
    aggacccgcgaggaagggcc....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                         Length DB
                1155
1155
1155
1155
1155
1155
1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  using
US-10-104-047-2639

US-08-286-889-46

US-08-485-618-46

US-08-362-652-46

US-08-605-672-46

US-08-943-363-46

US-09-193-043-46

US-09-193-043-46

US-09-688-307A-46

US-09-350-259-46

US-08-362-652-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                frame_plus_n2p model
                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (without alignments) 5016.322 Million ce.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ....aaaaaaaaaaaaaaaaaa 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1144120
                                          Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                Sequence
Sequence
Sequence
                                                                                                                                                                                         Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cell updates/sec
                Sequence
                               Seguence
   444444DD
   ঠ
                                              밁
                                                                        გ
```

45	44	43	42	41	40	39	38	37	36	35	34	3	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
6	162.5	5	5	23	5	53	2	23	23	3	3	3	3	3	63	3	63	3	3	63	ဌ	S	63	3	63	S	167	167	167	167	167	167
6.4	6.4	•	6.4		٠	6.4	6.4	6.4			٠	6.4	6.4	•	٠	•	•	6.4	•	•	6.4	•	•	6.4	•	•	•	•	•	•	6.6	•
1161	1151	1151	1151	15	1151	15	1151	1151	1151	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161	1161
<b>j</b>	N	N	N	۲	_	μ	-	L	Ľ	N	N	N	N	N	N	μ	μ	<b>)</b>	۳	۳	μ	μ	μ	_	Ъ	μ	N	N	N	<b>–</b>	H	r
18-	-09-350-259-3	07A-	-09-193-043-3	-08-943-3	-08-482-293A-	-08-605-672-3	-08-362-652	-08-485-618-3	-08-286-889	-09-350-259-9	-09-350-259	-09-688-307A-	9-688-307	-09-193-043-9	-09-193-043	-08-943-363	-08-943-363	-08-482-293A-	-08-482-293	-08-605-672-9	-08-605-672-	-08-362-65	-08-485-618-	-08-485-618-	US-08-286-889-2	-08-173-497-	-09-350-259-	-09-688-307A-	9-193-043-5	-08-943-363-5	-08-482-293	8-605-672-5
, App	37,	, App	37, App	37,	37,	37,	37,	e 37,	e 37,	e 99,	ν	99,	2	99,	'n	99,	2	Sequence 99, Appl	'n	99,	ν,	٧,	99,	,	'n	2	53,	53, App	53,	53, App	Sequence 53, Appl	, App

## ALIGNMENTS

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                      ; LENGTH: 488
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-104-047-2639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1
US-10-104-047-2639
US-09-970-076-1 (1-1414) x US-10-104-047-2639 (1-488)
                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                       Score:
                                                                                                                                                                                                                                                                                                                                                                              Sequence 2639, Application US/10104047
Patent No. 6943241
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
APPLICANT: HELIX RESEARCH INSTITUTE
APPLICANT: HELIX RESEARCH INSTITUTE
APPLICANT: HO. 6943241el full length cDNA
                                                                                                                                                                                                                                          SOFTWARE: PatentIn SEQ ID NO 2639
                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE:
                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 4096
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: NO. | FILE REFERENCE: H1-A0105
                                   2.22e-93
965.00
64.34%
48.38%
37.99%
                                                   Conservative: Mismatches: Indels:
                                Gaps:
                                                                                                      Matches:
                                     488
194
64
101
42
```

89

á

유 성

유 상 음 성 음

중 유

성 유

문

S

```
206
                                                                                                                                                                                                                                                                                     266
                                                                                                                                                                                                                                                                                                                       905
                                                                                                                                                                                                                                                                                                                                                                                                                                226
                                                                                                                                                                                                                                                                                                                                                                                                                                                               785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   128
   346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAA 304
                                                                                                                                           GlySerLeuIleValThrAlaThrGluCysSerAsnGlyIleAlaAlaIleIleValIle
                                                                                                                                                                                                             LysAlaGiyGluThrLeuAspValSerValSerPheAsnGlyGlyLysSerValileSer
                                                                                                                                                                                                                                                                                     SerValLysProValSerValGlnLeuAsnSerMetLeuCysProAlaProIleLeuAsn
                                                                                                                                                                                                                                                                                                                       AATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnAlaThrIleIleLeuProLeuThrGlyAspArgGlyLysIleSerLysGlyLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCTAGAA 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGTTGGCTCACAAATTCATCAGCCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ValLeuAspLysSerGlySerValAlaAsnAsnTrpIleGluIleTyrAsnPheValGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlyGlyLeuLeuArgAlaGlnGluGlnProSerCysArgArgAlaPheAspLeuTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGGGA---CGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
AGTTCTGTCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTG
                                                                                                                                                                                                                                                                                                                                                       LeuGlySerArgAsnGlySerValLeuCysThrTyrThrValAsnGluThrTyrThrThr
                                                                                                                                                                                                                                                                                                                                                                                         CATGCCCGCAACGTGGACAGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerArgSerLeuGlyAlaSerValTyrCysValGlyValLeuAspPheGluGlnAlaGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnLeuAlaGluArgPheValSerProGluMetArgLeuSerPheIleValPheSerSer
                                                                   LeuValLeuLeuLeuLeuGlyIleGlyLeuMetTrpTrpPheTrpProLeuCysCys
                                                                                         GAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTATCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                              ProSerSerValCysValGlyGluGluPheGlnIleValLeuSerGlyArgGlyPheMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuGluArgIleAlaAspSerLysGluGlnValPheProValLysGlyGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ||||||||||:::|||
LeuThrAspGlyLysLeuAspGlyLeuValProSerTyrAlaGluLysGluAlaLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----LeuLeuValLeuSerGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               107
                                                                                                                                                                                                                                                  1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27
                                                                       345
                                                                                                                                                                                                                 305
                                                                                                                                                                                                                                                                                                                                                                                               904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               664
```

밁

δ

음 중

밁 δ 밁 Ś 밁 Ş 밁 ş В á 밁 á 밁 5 망 S

```
RESULT 2
US-08-286-889-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                            Ś
                                                                                                               밁
                                                                                                                                              S
                                                밁
                                                                                                                                                                                 밁
                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                    US-09-970-076-1 (1-1414) x US-08-286-889-46 (1-1155)
                                                                                                                                                                                                                                                                                                    Query Match:
                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                         Score:
                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-286-889-46
                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 46, Application US/08286889 Patent No. 5470953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/286,889
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/173,497
FILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 2366/3216
REFERENCE/DOCKET NUMBER: 27866/3216
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 225
CITY: Chicago
CTATE: Illinois
TTATE: Tinited
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Gallatin, W. Mich
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5470953el
NUMBER OF SEQUENCES: 51
                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                        No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: Illinois
COUNTRY: United States
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Marshall, O'Toole, Ge
STREET: 233 South Wacker Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      366
                                                132 rLeuGlnPheIleGlnAlaIleProAlaThrMet------
                                                                                                                                                                                   93
                                                                                                                                                                                                                    28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      amino
                                                                                                                 GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuLeuGlySerSe
                                                                                                                                                    CCCCGGGCTGCGGGC-----CATGGCCACGGCGAGCCGAGAGCCCTCGGCATCGG
                                                                                                                                                                                   GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glu 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAA 1195
               GGAGGATGGGGGTCCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAA
                                                                              CTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAG
                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Floppy disk
                                                                                                                                                                                                                                                                                      2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27866/32168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerstein, Murray
e, 6300 Sear Tower
                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 Integrin Alpha Subunit
=
                                                                                                                                                                                                                                                                                     1155
77
50
125
47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Borun
198
                                                                                                                    132
                                                    143
```

ঠ

á

문

맑

```
RESULT 3
US-08-485-618-46
JS-08-485-618-46
Sequence 46, Application
Formula 100, 5728533
Fatent 100, 5728533
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                   COMPUTER: IBM PC COMPACTIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,618
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                               NERAL INFORMATION W. MIGHAUL APPLICANT: Gallatin, W. MIGHAUL APPLICANT: Van der Vieren, Monica APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5728533el
                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & STREET: 233 South Wacker Drive, 6300 Sear Tower
CLASSIFICATION: 435
PRIOR APPLICATION DATA
APPLICATION NUMBER:
                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatil
                                                                                                                                                                                                                            COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                     STREET: 233 Sout
CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGATCATGTGTTTCCCGGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAAT 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        eProGluAlaGluLysAla------GlyIleIleArgTyrAlaIleGlyValGlyAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        eLeuileValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCAGGAAGTGTG---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ------ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rSerPheGlnHisGluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC 862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nAspHisValPheLysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T---TTCAATGAG---ACACAGCTGGCCCGGATT------GCGGACAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            alleValGlnLeuGln-------GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sThrH1sPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACCTTAATGAAACTGACAGAAGACAGA------GAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         eGlnGluLys-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              тттдалдалдтсстдсатсдалаттстадсадстдалссатссассататстдсаддада
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         pAlaPheArgGluProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               - AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08485618
    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----IlePheAlaIleGluGlyThrGluSerArgSerSerSe
    08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                  Human
                                                                                                                             Version
                                                                                                                                                                                                                                                                                                                                                                                                  2 Integrin Alpha
                                                                                                                             世
                                                                                                                                                                                                                                                                                                                                     Borun
                                                                                                                                                                                                                                                                                                                                                                                                    Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                              S
                                                                                                                                              S
                                                                                                                                                                                       밁
                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-1 (1-1414) x US-08-485-618-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-485-618-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
LENGTH: 1155 amino aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 276
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               М
О.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                    373
                                                                                                                                                                                                                                                                                                                                                             179
                                                                                                                                                                                                                                                                                                                                                                                                                                             159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             256 ATCAGGAAGTGTG----CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      199
                                                                535 CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    amino acid
)GY: linear
                            eLeuIleValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl
                                                                                                                                                                                           alleValGlnLeuGln-----
                                                                                                                                                                                                                                                                                                                                                           tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy 199
                                                                                                                                                                                                                                                                                                                                                                                                                                      ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rLeuGlnPheIleGlnAlaIleProAlaThrMet----------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuGlySerSe 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCCGGGCTGCGGGC-----CATGGCCACGGCGAGCGGAGAGCCCCTCGGCATCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCTGCTCT
                                                                                                       nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl
                                                                                                                                                  AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT 534
                                                                                                                                                                                                                              sThrHisPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl
                                                                                                                                                                                                                                                                                                                    AACCTTAATGAAACTGACAGAAGACAGA------GAACAAATCCGTCAAGG 417
                                                                                                                                                                                                                                                                                                                                                                                                    TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGl 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGGATGGGGGTCCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2.08e-08
167.00
42.47%
25.75%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                           --GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1155
77
50
125
47
```

138 112 87

372

312

143

219

234

589 254 밁 Ś В Ş 밁 र् 밁 ঠ 밁 र् 밁 5 밁 Ś 밁 S 밁 á В

```
RESULT 4
US-08-362-652-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
     Query
                      Best Local Similarity:
                                     Percent Similarity:
                                                         Score:
                                                                                         Alignment Scores:
                                                                                                                              US-08-362-652-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 46, Applicat Patent No. 5766850 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/3239
                                                                                                                                                                                                                                       TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5766850el
NUMBER OF SEQUENCES: 93
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FLOPPY DC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                 MOLECULE TYPE:
                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                         TELEPHONE: 312-474-6300
   Match:
                                                                          No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 233 Sc
CITY: Chicago
                                                                                                                                                                TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 0: FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rSerPheGlnHisGluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCATTTCAAGTTGTCGTGAGAGGAAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nAspHisValPheLysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pAlaPheArgGluProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    eProGluAlaGluLyaAla-----GlyIleIleArgTyrAlaIleGlyValGlyAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       eGlnGluLys-----IlePheAlaIleGluGlyThrGluSerArgSerSerSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA

    AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGAAAGA

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/08362652
                                                                                                                                                                                                   1155 amino acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B: Marshall, O'Toole, Gerstein, Murray & Borun233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                            312-474-0448
                                                                                                                                               protein
2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/08/362,652
                                                                                                                                                                                                                                                                                                                               27866/32391
                                     Length:
Matches:
Conservative:
                    Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Integrin
 1155
77
50
125
47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                             RESULT 5
US-08-605-672-46
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-1 (1-1414) x US-08-362-652-46 (1-1155)
                                                                      Sequence 46, Application US/08605672 Patent No. 5817515
GENERAL INFORMATION:
                    APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5817515el
     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                           330
                                                                                                                                                                                                                                                                                                                                                                  889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              113
                                                                                                                                                                                     346 rSerPheGlnHisGluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                                                                                                                                                       291
                                                                                                                                                                                                                                                                                                                                                                                                                                         649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        179 tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28
                                                                                                                                                                                                                      GTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC 862
                                                                                                                                                                                                                                                                                                                                                              GGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCAGGAAGTGTG---CTGCACCACTGGAATGAAATCTATTACTTTTGTGGAACAGTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nAspHisValPheLysValGlyAsn---PheValAlaLeuArgSerileGlnArgGlnIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           eProGluAlaGluLysAla-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                eLeuileValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACCTTAATGAAACTGACAGAAGACAGA------GAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rLeuGlnPheIleGlnAlaIleProAlaThrMet-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuGlySerSe 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ęęcecerccreaegerceregesaetrcecegaeceregeaageaegeaecegacccrectct
                                                                                                                                                                                                                                                                                                                                                                                                      pAlaPheArgGluProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          alleValGlnLeuGln-------GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sThrHisPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAGGATGGGGGTCCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAA
                                                                                                                                                                                                                                                           eGlnGluLys.
                                                                                                                                                                                                                                                                                           T---TTCAATGAG---ACACAGCTGGCCCGGATT------GCGGACAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGl 159
                                                                                                                                                                                                                                                          IlePheAlaIleGluGlyThrGluSerArgSerSerSe
                        Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -GlyIleIleArgTyrAlaIleGlyValGlyAs
                        2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14
```

589 254 534 234 477 219

803

311 687 291 648 417

179

255

CORRESPONDENCE ADDRESS:

g

179 tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy

219 417

648

254

534

589

234 477

687

311

291

807

```
Percent Similarity:
Best Local Similarity:
                                                                                                                                                    S
                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                   გ
                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
DB:
              δ
                                                   밁
                                                                                   S
                                                                                                                    밁
                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-1 (1-1414) x US-08-605-672-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-605-672-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 1155 amino aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 01
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 01
FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      No . .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                           199
                                                                                                                                                                                            132
                                                                                                                                                                                                                                139
                                                                                                                                                                                                                                                                   113
                  313
                                                     159
                                                                                                                        144
                                                                                                                                                                                                                                                                                                    88
                                                                                                                                                                                                                                                                                                                                       93
                                                                                                                                                                                                                                                                                                                                                                           28
                                                                                                                                                                                                                                                                 GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuLeuGlySerSe 132
                TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC
                                                                                                                                                                                                                                                                                                    cccceecreceec----
                                                                                                                                                                                                                                                                                                                                      GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla 112
                                                                                                                                                                                                                                                                                                                                                                           GGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAAGGAGCGGACCCTGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-3856
                                                                                   ATCAGGAAGTGTG---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC 312
                                                                                                                      -----ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGl 159
                                                                                                                                                         GGAGGATGGGGGTCCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAA 255
                                                                                                                                                                                              rLeuGlnPheIleGlnAlaIleProAlaThrMet------
                                                                                                                                                                                                                              CTTCCAGTGGCTCTTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Illinois
                                                   ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E: Marshall, O'Toole, Gerstein, Murray & 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                              2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27866/32684
                                                                                                                                                                                                                                                                                                    -CATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGG 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #1
 ::
                                                                                                                                                                                                                                                                                                                                                                                                                                             1155
77
50
125
147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Borun
::
=
                  372
                                                                                                                                                                                              143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-482-293A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 46, Application US/08482293A
Patent No. 5831029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                      STREET: Chicago
CITY: Chicago
Illinois
Thited
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                       FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5831029el Human
                                                                                                     APPLICATION NUMBER: US 0 FILING DATE: 23-DEC-1993 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                         COUNTRY:
ZIP: 606
                                                                      APPLICATION NUMBER: US
FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   808 GTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC 862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         311 nAspHisValPheLysValGlyAsn---PheValAlaLeuArgSerTleGlnArgGlnTl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    274 eProGluAlaGluLysAla------GlyIleİleArgTyrAlaIleGlyValGlyAs
                                                                                                                                                                                                                                                                                                                                         RY: United States 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pAlaPheArgGluProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          eLeuIleValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       allevalGlnLeuGln------GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACCTTAATGAAACTGACAGAAGACAGA------GAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      eGlnGluLys--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T---TTCAATGAG---ACACAGCTGGCCCGGATT------GCGGACAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sThrHisPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl
                                                                                                                                                                                                                                                                                                                                                                                                              233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                  Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       103
                                     US 08/362,652
                                                                                                                                                                                                                   US/08/482,293A
                                                                                        08/286,889
                                                                                                                                            08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -ilePheAlaIleGluGlyThrGluSerArgSerSerSe
                                                                                                                                                                                                                                                      Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 Integrin Alpha Subunit
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                             밁
                                                                                           Ś
                                                                                                                                                     ş
                                                                                                                                                                                          밁
                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                         믕
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-1 (1-1414) x US-08-482-293A-46 (1-1155)
 밁
                            á
                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-482-293A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 46:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Williams Jr., Joseph REGISTRATION NUMBER: 38,659
                                                                                                                            254
                                                                                                                                                          535
                                                                                                                                                                                           234
                                                                                                                                                                                                                           478
                                                                                                                                                                                                                                                          219
                                                                                                                                                                                                                                                                                        418
                                                                                                                                                                                                                                                                                                                        199
                                                                                                                                                                                                                                                                                                                                                      373 AACCTTAATGAAACTGACAGAAGACAGA-----GAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                     179 tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy 199
                                                                                                                                                                                                                                                                                                                                                                                                                     313
                                                                                                                                                                                                                                                                                                                                                                                                                                                   159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          256 ATCAGGAAGTGTG---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               132 rLeuGlnPheIleGlnAlaIleProAlaThrMet------143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             139 CTTCCAGTGGCTCTTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGGACGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28
                                                                                                                                                                                        nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl
                                                                                                                                                                                                                                                                                     ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuLeuGlySerSe 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCGCGTCCTGAGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCTGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                   TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla 112
pAlaPheArgGluProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGl
                             T---TTCAATGAG---ACACAGCTGGCCCGGATT--------GCGGACAGTAA
                                                             eProGluAlaGluLysAla--
                                                                                                                          eLeuileValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl
                                                                                                                                                          CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                         AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT
                                                                                                                                                                                                                                                       alleValGlnLeuGln-------GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                      sThrHisPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAGGATGGGGGTCCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTTGGACAA 255
                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               --ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGl 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative:
                                                           -GlylleileArgTyrAlaileGlyValGlyAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1155
77
50
125
47
                                                                                                                                                                                                                                                                                                                                                      417
                                                                                             648
                                                                                                                            274
                                                                                                                                                                                                                                                         234
 311
                                                               291
                                                                                                                                                          589
                                                                                                                                                                                           254
                                                                                                                                                                                                                           534
                                                                                                                                                                                                                                                                                                                        219
                                                                                                                                                                                                                                                                                                                                                                                                                     372
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-943-363-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                     US-09-970-076-1 (1-1414) x US-08-943-363-46 (1-1155)
                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                          Query Match:
                                                                                                                                                                          Pred
                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                               US-08-943-363-46
                                                                                                                                                                                                                                                                                                  TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 46:
SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 46,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5837478el Human
NUMBER OF SEQUENCES: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION UMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STEET: 22.
STEET: Chicago
CITY: Chicago
Tininois
Tinited
                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph |
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27/
                                                                                                                                                                                                                                                 TOPOLOGY: 1: MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Ge
STREET: 233 South Wacker Drive,
                                                                                                                                                                        No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                      TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    346 rSerPheGlnHisGluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
28 GGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCTGCTCT
                                                                                                                                                                                                                                                                                  amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCATTTCAAGTTGTCGTGAGAGGAAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nAspHisValPheLysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           eGlnGluLys------liePheAlaIleGluGlyThrGluSerArgSerSerSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/08943363
                                                                                                                                                                                                                                               protein
                                                                            2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   O'Toole, Gerstein, Murray & Borun
cker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                             46
                                                                                                                                                                                                                                                                                                                                                                                                                                           27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Þ
                                                                                              Conservative:
Mismatches:
Indels:
                                                                                                                                                    Length:
Matches:
                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #1.25
                                                                          1155
77
50
125
47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     330
     87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  807
```

Ś

```
ફ
         FEGURACY FOR APPLICATION US/09193043

PACENT NO. 6251395

GENERAL INFORMATION:
APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monice
TITLE OF INVENTION: NO. 6251395cl Human 2
FILE REFERENCE: 27866/35004

CURRENT FILING DATE: 1998-11-16

EARLIER APPLICATION NUMBER: US/09/193,043

EARLIER APPLICATION NUMBER: 08/173,497

EARLIER APPLICATION NUMBER: 08/173,497
                                                                                                                                                                                        RESULT 8
US-09-193-043-46
                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                            ર્
                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                   688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  139
                                                                                                                                                                                                                                                                                                     330
                                                                                                                                                                                                                                                                                                                                                                    311
                                                                                                                                                                                                                                                                                                                                                                                                                                   291
                                                                                                                                                                                                                                         346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93
 APPLICATION NUMBER: 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               yserGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ||| |||||| :::
GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             eProGluAlaGluLysAla------GlyIleileArgTyrAlaileGlyValGlyAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             alleValGlnLeuGln------GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCAGGAAGTGTG----CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rLeuGinPheIleGlnAlaIleProAlaThrMet------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuGlySerSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rSerPheGlnHisGluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                     GTCATTTCAAGTTGTCGTGAGAGGAAAACGGCTTCCGACATGCCCGCAACGTGGAC 862
                                                                                                                                                                                                                                                                                                                                                                    nAspHisValPheLysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIl

    AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTTGTTGGTGAAAGA

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             eLeuIleValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sThrHisPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACCTTAATGAAACTGACAGAAGACAGA------GAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ------ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAGGATGGGGGTCCAGCCTGCTACGGC----GGATTTGACCTGTACTTCATTTTGGACAA
                                                                                                                                                                                                                                                                                                      eGlnGluLys------IlePheAlaIleGluGlyThrGluSerArgSerSerSe
                                                                                                                                                                                                                                                                                                                                    TTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                 pAlaPheArgGluProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T---TTCAATGAG---ACACAGCTGGCCCGGATT-------GCGGACAGTAA
                                                                                                                                                                                                                                         364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    198
                                                                                                                                                                                                                                                                                                                                                                                                   747
                                                                                                                                                                                                                                                                                                                                                                                                                                     311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; EARLIER FILING DATE: 1994-08-05; EARLIER APPLICATION NUMBER: 08/362,652; EARLIER FILING DATE: 1994-12-21; EARLIER APPLICATION NUMBER: 08/943,363; EARLIER FILING DATE: 1997-10-03; NUMBER OF SEQ ID NOS: 114; SOFTWARE: Patentin Ver. 2.0; SEQ ID NO 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                밁
                                                                         S
                                                                                                               밁
                                                                                                                                     S
                                                                                                                                                                         밁
                                                                                                                                                                                                       S
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                β
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-1 (1-1414) x US-09-193-043-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-193-043-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 1155
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ŏ.
                                                                                                                                                                                                                                                                            478
                                                                                                                                                                                                                                                                                                                                                                       199
                                                                                                                                                                                                                                                                                                                                                                                                       373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              113
                  889
                                                                                                                                               590
                                                                                                                                                                                                                                          234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28
GGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAAT
                                                                                                                                                                         eLeuIleValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl
                                                                                                                                                                                                                                                                                                                                                                                                                                   tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCCGGGCTGCGGGC
                                              pAlaPheArgGluProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGl
                                                                                                             eProGluAlaGluLysAla------GlyIleIleArgTyrAlaIleGlyValGlyAs
                                                                                                                                                                                                           CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                                         nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl
                                                                                                                                                                                                                                                                        AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT
                                                                                                                                                                                                                                                                                                        alleValGlnLeuGln---
                                                                                                                                                                                                                                                                                                                                       sThrHisPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCAGGAAGTGTG----CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rLeuGlnPheIleGlnAlaIleProAlaThrMet-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGGACGCAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuGlySerSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCTGCTCT
                                                                                                                                               -AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                       AACCTTAATGAAACTGACAGAAGACAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAGGATGGGGGTCCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAA
                                                                                 T---TTCAATGAG---ACACAGCTGGCCCGGATT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -- CATGGCCACGGCGGAGCGGGAGAGCCCTCGGCATCGG 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                           -----GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                                                                                                        ------GAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1155
77
50
125
47
                                                                                 GCGGACAGTAA 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  132
                                                                                                                                                                                                                                                                            534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 112
                                                     311
                                                                                                                                                                                                                                                                                                           234
                                                                                                                                                                                                                                                                                                                                                                         219
                                                                                                                                                                                                                                                                                                                                                                                                        417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     312
                     747
                                                                                                                  291
                                                                                                                                                  648
                                                                                                                                                                                                                589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   143
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                  ð
                                                                                             S
                                                                                                                                           밁
                                                                                                                                                                             δ
                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-688-307A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-1 (1-1414) x US-09-688-307A-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-688-307A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 09/193,043
PRIOR FILING DATE: 1998-11-16
PRIOR APPLICATION NUMBER: 08/605,672
PRIOR FILING DATE: 1996-02-22
PRIOR FILING DATE: 1996-02-22
PRIOR APPLICATION NUMBER: 08/173,497
PRIOR APPLICATION NUMBER: 08/286,889
PRIOR APPLICATION NUMBER: 08/286,889
PRIOR FILING DATE: 1994-08-05
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR FILING DATE: 1994-12-21
PRIOR APPLICATION NUMBER: 08/943,363
PRIOR APPLICATION NUMBER: 08/943,363
PRIOR FILING DATE: 1997-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 46, Appli
Patent No. 6432404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 114
SOFTWARE: PatentIn Ver. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/688,307A CURRENT FILING DATE: 2000-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 6432404el Human Beta-2
FILE REFERENCE: 27866/36646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Gallatin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 1155
                                                                                                                                         144
                                                                                                                                                                                 199
                                                                                                                                                                                                                                                              139
                                                                                                                                                                                                                                                                                                      113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         311
                                                            159
                                                                                                                                                                                                                        132 rLeuGlnPheIleGlnAlaIleProAlaThrMet-------
                                                                                                                                                                                                                                                                                                                                             88
                                                                                                                                                                                                                                                                                                                                                                                 93
                                                                                                                                                                                                                                                                                                                                                                                                                        28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              46, Application US/09688307A
                                                                                                                                                                                                                                                                                                                               CCCCGGCCTGCGGGC------CATGGCCACGGCGAAGCGGAAGAGCCCTCGGCATCGG
                                                                                                                                                                                                                                                              CTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAG
                                                                                                                                                                                                                                                                                                      GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuLeuGlySerSe 132
                                                                                                                                                                                                                                                                                                                                                                                   GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nAspHisValPheLysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIl
                                                                                                                                                                                                                                                                                                                                                                                                                        GGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCTGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rSerPheGlnHisGluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
                    TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC
                                                          ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe
                                                                                                  ATCAGGAAGTGTG----CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC
                                                                                                                                                                               GGAGGATGGGGGTCCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          eGlnGluLya------IlePheAlaIleGluGlyThrGluSerArgSerSerSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Michael W.
                                                                                                                                         ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative: Mismatches: Indels:
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1155
77
50
125
47
1 1 1 1 1 1 1 1 1
                                                                                                  312
                                                                                                                                         159
                                                                                                                                                                                                                        143
                                                                                                                                                                                                                                                                198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-350-259-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/350,259
CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/193,043
EARLIER FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER APPLICATION NUMBER: 08/266,889
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/362,652
Query Match:
                                                                                                    Alignment Scores
                                                                                                                                                                                                  SEQ ID NO 46
LENGTH: 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 46,
Patent No. 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Gallatin, Michael W. APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: NO. 6620915el Human 2 FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                                EARLIER FILING DATE: 1997-10-03
                                                                                                                                                                                                                                                                                                      EARLIER APPLICATION NUMBER: 08/943,363
                                                                                                                                                                                                                                           SOFTWARE: PatentIn Ver.
                                                                                                                                                            ORGANISM: Mus musculus
                                                                                                                                                                                   TYPE: PRT
                                                                                 No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  373 AACCTTAATGAAACTGACAGAAGACAGA------GAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               346 rSerPheGlnHisGluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           590 -AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        535 CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         219 alleValGlnLeuGln-------GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         179 tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 eProGluAlaGluLysAla------GlyIleIleArgTyrAlaIleGlyValGlyAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nAspHisValPheLysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGATCATGTGTTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sThrHisPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            eGlnGluLys--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   eLeuIleValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09350259
2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----ilePheAlaIleGluGlyThrGluSerArgSerSerSe
                                                          Length:
Matches:
                  Conservative: Mismatches:
  1155
77
50
125
47
```

BB:

```
RESULT 11
US-08-485-618-53
US-08-485-618-53
; Sequence 53, Application US/08485618
; Patent No. 5728533
; GENERAL INFORMATION:
    APPLICANT: Gallatin, W. Michael
    APPLICANT: Van der Vieren, Monica
    TITLE OF INVENTION: No. 5728533el Hu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-1 (1-1414) x US-09-350-259-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                139
                                                                                                                                                                                                                                                        808
                                                                                                                                                                                                                                                                                              330
                                                                                                                                                                                                                                                                                                                                     748
                                                                                                                                                                                                                                                                                                                                                                             311
                                                                                                                                                                                                                                                                                                                                                                                                                   889
                                                                                                                                                                                                                                                                                                                                                                                                                                                          291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       254
                                                                                                                                                                                                                346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuLeuGlySerSe 132
                                                                                                                                                                                                                                                        GTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC 862
                                                                                                                                                                                                                                                                                                                                                                                                  GGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAAT 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACCTTAATGAAACTGACAGAAGACAGA------GAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCACAMATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCAGGAAGTGTG---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rLeuGlnPheIleGlnAlaIleProAlaThrMet-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      eProGluAlaGluLysAla-----GlyIleIleArgTyrAlaIleGlyValGlyAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       eLeuileValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT 534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aIleValGlnLeuGln-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCCAGTGGCTCTTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCCGGGCTGCGGGC-----CATGGCCACGGCGAGAGCGGAGAGCCCTCGGCATCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               eGlnGluLy8-----IlePheAlaIleGluGlyThrGluSerArgSerSerSe
                                                                                                                                                                                                                                                                                                                                   TTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA
                                                                                                                                                                                                                                                                                                                                                                             nAspHisValPheLysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                          pAlaPheArgGluProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                T---TTCAATGAG---ACACAGCTGGCCCGGATT------GCGGACAGTAA 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gThrHisPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAGGATGGGGGTCCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAA
                                                                                                                                                                                                                rSerPheGlnHisGluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                   Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlyLeuThrTyrThrAlaSerGlyIleGl
                                   2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----
                                                                                                                                                                                                                     364
                                                                                                                                                                                                                                                                                                                                                                                                                                                             311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199
                                                                           밁
                                                                                                              δ
                                                                                                                                                          밁
                                                                                                                                                                                         S
                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-1 (1-1414) x US-08-485-618-53 (1-1161)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-485-618-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/17:
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/28:
PILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/36:
APPLICATION NUMBER: US 08/36:
APPLICATION NUMBER: US 08/36:
APPLICATION NUMBER: JOSEPH A
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0.
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 2:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-3300
TELEPHAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Мо
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 233 SO
CITY: Chicago
STATE: Illinoi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 1161 amino acids
                                       313
                                                                                                                                                          144
                                                                                                                                                                                                199
                                                                                                                                                                                                                                                                                                                     113
                                                                                                                                                                                                                                                                                                                                                            88
                                                                                                                                                                                                                                                                                                                                                                                                    93
                                                                                                                                                                                                                                                                                                                                                                                                                                          28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60606-6402
                                                                           ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe 179
                                                                                                                                                                                                                                                                         CTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGAACGCAG 198
                                                                                                                                                                                                                                                                                                                   GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuGlySerSe
                                                                                                                                                                                                                                                                                                                                                            CCCCGGGCTGCGGGC----
                                                                                                                                                                                                                                                                                                                                                                                                  GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla
                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAGCGGACCCTGCTCT
                  TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCACCCGAGGAAC 372
                                                                                                                  ATCAGGAAGTGTG----CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC
                                                                                                                                                        GGAGGATGGGGGTCCAGCCTGCTACGGC----GGATTTGACCTGTACTTCATTTTGGACAA
                                                                                                                                                                                                                                     rLeuGlnPheIleGlnAlaIleProAlaThrMet----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E: Marshall, O'Toole, Gerstein, Murray & 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27866/32797
                                                                                                                                                                                                                                                                                                                                                          -----CATGGCCACGGCGGAGCGGAGCCCCTCGGCATCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1163
77
50
125
47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Borun
```

112

87

132 138

143

ş 밁 á 밁 á 밁 S 밁 á 밁 5 밁 ঠ 밁 გ 밁 ঠ 밁 S 밁 გ 뭐 S 밁 ঠ 밁 S 밁 ঠ

밁

밁

```
RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-362-652-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 53, Application US/08362652 Patent No. 5766850
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNUBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., JOSEPh A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/3239.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5766850el
                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 9: CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                               STATE: I
                                                                                                                                                                                                                                                                                                                                                                                 STREET: 233 St
CITY: Chicago
                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              346
                                                                                                                                                                                                                                                                                                                                  60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pAlaPheArgGluProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         eProGluAlaGluLysAla------GlyIleIleArgTyrAlaIleGlyValGlyAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      eLeuIleValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alleValGlnLeuGln------GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sThrHisPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nAspHisValPheLysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T---TTCAATGAG---ACACAGCTGGCCCGGATT------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AACCTTAATGAAACTGACAGAAGACAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rSerPheGlnHisGluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              eGlnGluLys------ilePheAlaIleGluGlyThrGluSerArgSerSerSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA
                                                                                                                                                                                                                                                                                                                                                                  Illinois
                                                                                                                                                                                                                                                                                                                                                                                                   233 South Wacker Drive,
                                                                                                                                                                                                                                                                                                                                                 United States
                                                                                                                                                                                                                                                                                                                                                                                                                    Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     93
                                                                                                                                                                                                           US/08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                 O'Toole, Gerstein, Murray & cker Drive, 6300 Sear Tower
   27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                             Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 Integrin Alpha
                                                                                                                                                                                                                                             #
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·----GAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -GCGGACAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  747
                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                 á
                                                                                                   Ś
                                                                                                                                       밁
                                                                                                                                                                     S
                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                    吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-362-652-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-1 (1-1414) x US-08-362-652-53 (1-1161)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: 15
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144
     311
                                                                       291
                                                                                                                                                                                                                                                                               234
                                                                                                                                                                                                                                                                                                                                                                                   418
                                                                                                                                                                                                                                                                                                                                                                                                                      199
                                                                                                                                                                                                                                                                                                                                                                                                                                                      373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  113
                                                                                                                                                                                                             254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28
 alleValGlnLeuGln-------GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuLeuGlySerSe 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla
                                                                                                                                       eProGluAlaGluLysAla-----GlyIleIleArgTyrAlaIleGlyValGlyAs
                                                                                                                                                                                                       ::::|| :::||| :::
eLeuIleValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACCTTAATGAAACTGACAGAAGACAGA-------GAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCAGGAAGTGTG---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAGGATGGGGGTCCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTTGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rLeuGlnPheIleGlnAlaIleProAlaThrMet-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCCGGGCTGCGGGC-----CATGGCCACGGCGGAGCCGGAGAGCCCTCGGCATCGG
                                                                       pAlaPheArgGluProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGl
                                                                                                                                                                                                                                           CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                                                                             nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl
                                                                                                                                                                                                                                                                                                                                                                                   sThrHisPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ------ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGl 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCTGCTCT
                                                                                                       T---TTCAATGAG---ACACAGCTGGCCCGGATT------GCGGACAGTAA

    AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGA

                                                                                                                                                                                                                                                                                                               AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1161
77
50
125
47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    112
                                                                                                           687
                                                                                                                                                                             648
                                                                                                                                                                                                             274
                                                                                                                                                                                                                                                                                254
                                                                                                                                                                                                                                                                                                                                                  234
                                                                                                                                                                                                                                                                                                                                                                                                                                                      417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      87
                                         747
                                                                                                                                           291
                                                                                                                                                                                                                                               589
                                                                                                                                                                                                                                                                                                                  534
                                                                                                                                                                                                                                                                                                                                                                                    477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  143
```

δ 밁 Ş 밁 S 밁 ş 밁 δ 밁 á 밁 S 밁 δ

밁 δ 밁

```
Percent Similarity:
Best Local Similarity:
Ouery Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                     ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-605-672-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
           밁
                                                                 US-09-970-076-1 (1-1414) x US-08-605-672-53 (1-1161)
                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                              US-08-605-672-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 53, Applicat Patent No. 5817515
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                  TELEX: 25-3856
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 01
FILING DATE: 21-DEC-1994
ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 01
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5817515el NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                             MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                      8
0
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Chicago
STATE: Illino:
                                                                                                                                                                                                                                                                                                                                                                       NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659 REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                     TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 08/286,889 FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                             TELEFAX:
                                                                                                                                                                                                                                                                      ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              346 rSerPheGlnHisGluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
           93
                                        28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    eGlnGluLys------ilePheAlaIleGluGlyThrGluSerArgSerSerSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               тттвалвалегоствелтевалаттетаверавствалествессветатвтвенным
          GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla 112
                                        GGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCTGCTCT 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/08605672
                                                                                                                                                                                                                                                                       1161 amino acide
                                                                                                                                                                                                                                                                                                                             312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           United States
                                                                                                                                                                                                                            protein
                                                                                                          2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                               US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08/605,672
                                                                                                                                                                                                                                                                                                    53
                                                                                                                                                                                                                                                                                                                                                                          27866/32684
                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #
                                                                                              1161
77
50
125
47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                              US-08-482-293A-53
                                                                                                                                                                                                                               RESULT 14
                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                     Patent No. 583102
                                                                                                                                                                                                 Sequence 53,
                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                          APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5831029el
                                                                                               NUMBER OF SEQUENCES: 10
COMPUTER READABLE FORM:
                                        STREET: 2-
STREET: 2-
Chicago
TTY: Chicago
                         STATE: Illinois
COUNTRY: United States
                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    144
                                                                                                                                                                                                                                                                                                                    330
                                                                                                                                                                                                                                                                                                                                               748
                                                                                                                                                                                                                                                                                                                                                                                                                                   291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                199
              60606-6402
                                                                                                                                                                                                                                                                                                                    eGlnGluLys----
                                                                                                                                                                                                  Application US/08482293A
                                                                    233 South Wacker Drive,
                                                                                     Marshall, O'Toole,
```

```
S
346 rSerPheGlnHisGluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
                                                                                                                                                                                                                                 254 eLeuIleValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          219 alleValGlnLeuGln-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                373 AACCTTAATGAAACTGACAGAAGACAGA------GAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313 TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          256 ATCAGGAAGTGTG---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   132 rLeuGlnPheIleGlnAlaIleProAlaThrMet-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   113 GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuGlySerSe 132
                                                808 GTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC 862
                                                                                                                                                   TTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA
                                                                                                                                                                                                    nAspHisValPheLysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIl
                                                                                                                                                                                                                                                                                                  pAlaPheArgGluProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGl
                                                                                                                                                                                                                                                                                                                                                          T---TTCAATGAG---ACACAGCTGGCCCGGATT------
                                                                                                                                                                                                                                                                                                                                                                                                             eProGluAlaGluLysAla------GlyIleIleArgTyrAlaIleGlyValGlyAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC----AGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gThrHisPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCCGGGCTGCGGGC------CATGGCCACGGCGAGCCGGAGAGCCCCTCGGCATCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAGGATGGGGGTCCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAA
                                                                                                   ----IlePheAlaIleGluGlyThrGluSerArgSerSerSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                                                               -GCGGACAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        198
                                                                                                                                                                                                                                                            747
                                                                                                                                                                                                                                                                                                                                                               687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     255
                                                                                                                                                         807
                                                                                                                                                                                                                                                                                                                                                                                                                     291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               179
                                                                                                                                                                                                         330
                                                                                                                                                                                                                                                                                                               311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           143
```

Gerstein, 6300

Murray

& Borun

Sear

Human

2 Integrin Alpha Subunit

291 648 274 534 234

747 311

```
á
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: 1: MOLECULE TYPE: US-08-482-293A-53
                                                                                     á
                                                                                                                             밁
                                                                                                                                                             ঠ
                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-1 (1-1414) x US-08-482-293A-53 (1-1161)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE:
COMPUTER: IE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                  418
                                                      199
                                                                                         373
                                                                                                                               179
                                                                                                                                                                 313
                                                                                                                                                                                                     159
                                                                                                                                                                                                                                         256
                                                                                                                                                                                                                                                                             144
                                                                                                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                                                                                                                     132
                                                                                                                                                                                                                                                                                                                                                                                         139
                                                                                                                                                                                                                                                                                                                                                                                                                           113
                                                                                                                                                                                                                                                                                                                                                                                                                                                             88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
                  AACCTTAATGAAACTGACAGAAGACAGA-----
                                                                                                                                                                                                     ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe
                                                                                                                                                                                                                                         ATCAGGAAGTGTG---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC 312
                                                                                                                                                                                                                                                                                                             GGAGGATGGGGGTCCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAA 255
                                                                                                                                                                                                                                                                                                                                                   rLeuGlnPheIleGlnAlaIleProAlaThrMet-----
                                                                                                                                                                                                                                                                                                                                                                                                                         GlnArgAlaCysAlaLysAsnMetTyrAlaLysGlySerCys-LeuLeuLeuGlySerSe 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCCGGGCTGCGGGC-----CATGGCCACGGCGAGAGCGGAGAGCCCTCGGCATCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlyLeuSerLeuValAlaAspThrAsnAsnSerGlnLeuLeuAlaCysGlyProThrAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCGCGTCCCTGAGGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCTGCTCT
                                                                                                                                                                 TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC
                                                                                                                                                                                                                                                                         -----ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGl 159
                                                                                                                                                                                                                                                                                                                                                                                       CTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAG 198
                                                     sThrHisPheThrPheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAl 219
                                                                                                                             tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein
:: =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  53:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps:
 <u>=</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           50
125
47
14
                                                                                           -GAACAAATCCGTCAAGG
                                                                                                                                                                                                                                                                                                                                                     -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1112
                                                                                                                                                                   372
                                                                                           417
                                                                                                                                                                                                                                                                                                                                                     143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-943-363-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 53, Application US/08943363
Patent No. 5837478
GENERAL INFORMATION:
GAPPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el
                                                                                     CURRENT APPLICATION NUMBER: US/08/943,363
APPLICATION NUMBER: US/08/943,363
FILING DATE:
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
PRICHASTON NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRICHATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/ACENT INFORMATION:
NAME: Williams Jr., JOSEPH A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32684
   INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: DOS PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                        TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: I
                  TELEFAX:
TELEX: 2:
                      TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rSerPheGlnHisGluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 eProGluAlaGluLysAla------GlyIleİleArgTyrAlaIleGlyValGlyAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           eLeuIleValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCATTTCAAGTTGTCGTGAGAGGAAAACGGCTTCCGACATGCCCGCAACGTGGAC 862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   eGlnGluLys------IlePheAlaIleGluGlyThrGluSerArgSerSerSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aIleValGlnLeuGln---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pAlaPheArgGluProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T---TTCAATGAG---ACACAGCTGGCCCGGATT------GCGGACAGTAA 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Illinois
 FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3: Marshall, O'Toole, Gerstein, Murray & Borun
233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    United States
                                                        312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              114
                                                                                            27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ------GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                                                                                                                                                                                              Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N
                                                                                                                                                                                                                                                                                                                                                                                                            #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Subunit
```

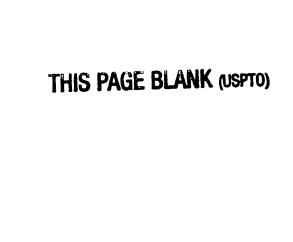
S

```
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1161 amino acide
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-943-363-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
Score:
                                                                                                                        Ş
                                                                                                                                                        밁
                                                                                                                                                                           á
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                              ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
밁
                      ঠ
                                                밁
                                                                   ঠ
                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-1 (1-1414) x US-08-943-363-53 (1-1161)
                                                                                                                                                                                  590
                                                                                                                                                                                                                                                                 234
                                                                                                                                                                                                                                                                                           478
                                                                                                                                                                                                                                                                                                                    219
                                                                                                                                                                                                                                                                                                                                              418
                                                                                                                                                                                                                                                                                                                                                                         199
                                                                                                                                                                                                                                                                                                                                                                                                   373
                                                                                                                                                                                                                                                                                                                                                                                                                             179
                                                                                                                                                                                                                                                                                                                                                                                                                                                      313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          311
                                                                            889
                                                                                                                               649
                                                                                                                                                          274
                                                                                                                                                                                                            254
330
                                                                                                      291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28
                                                                                                                                                                                                                                                              nLysValValLysGluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIl
                                                                                                     eProGluAlaGluLysAla-----GlyIleileArgTyrAlaIleGlyValGlyAs 291
                                                                                                                                                                                                                                                                                                                    alleValGlnLeuGln------GlyLeuThrTyrThrAlaSerGlyIleGl
                                                                                                                                                                                                                                                                                                                                             tGlyGlnLeuAlaSerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLy 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAAC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ySerGlySerIleAspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMe 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCAGGAAGTGTG---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGl 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCCGGGCTGCGGGC-----CATGGCCACGGCGGAGCCGGAGAGCCCTCGGCATCGG 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCGCGTCCCTGAGGGTCGTGGCGAGTTCGCGGAGCGTGGGAAGGAGCGGACCCTGCTCT
                                                                  GGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAAT 747
                                                                                                                                                                                                          ::::||| :::||||||||||:::
eLeuIleValIleThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIl 274
                                                                                                                                                                                                                                       CATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----
                                                                                                                                                                                                                                                                                          AAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGT 534
                                                                                                                                                                                                                                                                                                                                                                       aThrHiaPheThrPheThrGluPheLyaSerSerLeuSerProGlnSerLeuValAspAl 219
                                                                                                                                                                                                                                                                                                                                                                                                  AACCTTAATGAAACTGACAGAAGACAGA------GAACAAATCCGTCAAGG 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAGGATGGGGGTCCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAA 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rLeuGlnPheIleGlnAlaIleProAlaThrMet------
eGlnGluLys---
                                                 T---TTCAATGAG---ACACAGCTGGCCCGGATT-------GCGGACAGTAA 687
                                                                                                                                                                                   -AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGAAAGA 648
                        TTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA 807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.08e-08
167.00
42.47%
25.75%
6.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        acids
-IlePheAlaIleGluGlyThrGluSerArgSerSerSe 346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1161
77
50
125
47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----
                                                                                                                                                                                                                                                                                                                       234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          143
                                                                                                                                                                                                                                        589
                                                                                                                                                                                                                                                                  254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          87
```

```
808 GTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC 862
||||||||
::: |||
346 rSerPheGInHisGlumetSerGInGluGlyPheSerSerAlaLeuSerMetAsp 364
```

음 성

Search completed: December 14, 2005, 12:02:33 Job time : 63.1092 secs



Run on:

Sequence 194, App
Sequence 301, App
Sequence 194, App
Sequence 194, App
Sequence 301, App
Sequence 18, Appl
Sequence 20, Appl
Sequence 20, Appl
Sequence 20, Appl
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 14, Appl
Sequence 14, Appl
Sequence 16, Appl
Sequence 17, Appl
Sequence 10, Appl
Sequence 10, Appl
Sequence 10, Appl
Sequence 11, Appl
Sequence 12, Appl
Sequence 13, Appl
Sequence 12, Appl
Sequence 13, Appl
Sequence 13, Appl
Sequence 28, Appl
Sequence 30, Appl
Sequence 28, Appl
Sequence 30, Appl
Sequence 30, Appl
Sequence 30, Appl
Sequence 30, Appl

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database :
                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                  Score
   .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein search, using frame_plus_n2p model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Agapop 10.0, Xgapext
Ygapop 10.0, Ygapext
Ygapop 6.0, Fgapext
Pgapop 6.0, Delext
                                                                                                                                                                                                                                                Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                 Published Applications AA Main:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-1
2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           December 14, 2005, 11:59:14; Search time 212.268 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1867569 eeqs, 417829326 residues
   74.66
74.66
74.66
74.66
74.66
74.66
74.66
74.66
74.66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                  Length
     BB
                   US-11-047-278-2

US-09-918-715-187

US-09-918-715-232

US-10-001-822-199

US-10-408-765A-1823

US-10-474-794-187

US-10-474-794-232

US-10-979-159-187

US-10-979-159-187

US-10-979-159-187

US-10-979-159-187

US-10-979-159-187

US-10-979-159-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       summaries
                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . . . . . .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (without alignments)
5566.636 Million cell updates/sec
Sequence 2, Appli
Sequence 187, App
Sequence 232, App
Sequence 199, App
Sequence 187, App
Sequence 187, App
Sequence 232, App
Sequence 232, App
Sequence 6, Appli
Sequence 6, Appli
Sequence 621, App
Sequence 621, App
Sequence 620, App
                                                                                                                                                                                                                                                  Description
                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/11047278

publication No. US20050196407A1

publication No. US20050196407A1

publicaNT: Young, John A.T.

APPLICANT: Bradley, Kenneth A.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Mogridge, Jeremy S.
APPLICANT: Mogridge, Jeremy S.
APPLICANT: Mogridge, Jeremy S.
APPLICANT: MOGRIDGE, VICTOR Receptor TITLE OF INVENTION. Anthrax Toxin Receptor FILE REFERENCE: 960296.97745

CURRENT APPLICATION NUMBER: US/11/047,278

CURRENT FILING DATE: 2005-01-31

PRIOR APPLICATION NUMBER: US/99/970,076

PRIOR APPLICATION NUMBER: 60/251,481

PRIOR FILING DATE: 2000-12-05

NUMBER OF SEQ ID NOS: 10

SOFTWARE: Patentin Ver. 2.1

SRO TIN NO 2
                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
       Ś
                                                                                                                                                                                                                                 ; LENGTH: 368
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-047-278-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-11-047-278-2
                                           US-09-970-076-1 (1-1414) x US-11-047-278-2 (1-368)
                                                                                                                                                          Score:
                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                               SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1634.5
1634.5
1633.5
1633
1633
1633
1626
14626
1495
1495
1495
1495
1495
1495
1495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1670
1654.5
1654.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1649
1649
1649
1649
1649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1636
1636
1636
         104 ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.46e-170
1914.00
100.00%
100.00%
100.00%
75.35%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \begin{array}{c} 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.55 \\ 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-918-715-194
US-09-918-715-301
US-10-474-794-301
US-10-474-794-301
US-10-979-159-3194
US-10-919-159-311
US-10-918-307-20
US-10-918-307-20
US-10-918-307-20
US-10-201-92-2
US-10-038-307-2
US-10-038-307-2
US-10-038-307-2
US-10-038-307-2
US-10-038-307-2
US-10-038-307-2
US-10-038-307-2
US-10-038-307-2
US-10-038-307-1
US-10-038-307-1
US-10-038-307-1
US-10-038-307-1
US-10-038-307-1
US-10-038-307-1
US-10-038-307-1
US-10-201-292-1
US-10-201-292-1
US-10-201-292-3
US-10-201-292-3
US-10-201-292-3
US-10-201-292-3
US-10-201-292-3
US-10-201-292-3
US-10-201-292-3
```

ALIGNMENTS

Result

Length:
Matches:
Conservative:
Mismatches:
Indels:

```
1184
                                                            1124
                                                                                                                                                           1004
                                                                                                                                   301
                                                                                    321
                                                                                                                                                                                   281
                                                                                                                                                                                                          944
                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                         884
                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                         824
                                                                                                                                                                                                                                                                                                                                   221
                                                                                                                                                                                                                                                                                                                                                        764
                                                                                                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                                                                                                       704
                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                       644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                   GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuValLeuI1eCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAGTGAGGAAAATAAAATAAAA 1207
                                                                                                                                                                                 ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                ValargGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ThralaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGATGGGGGGTCCAGCCTGCTAC
                                                  TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                           GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                 | IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                                              ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                      TrpPheTrpProLeuCysCysThrValIleIleLysGluValProProProProAlaGlu
                                                            1183
                                                                                                            1123
                                                                                                                                                           1063
                                                                                                                                                                                                            1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                       360
                                                                                                                                                                                   300
                                                                                                                                                                                                                                    280
                                                                                                                                                                                                                                                          943
                                                                                                                                                                                                                                                                                                         883
                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                         823
                                                                                                                                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                                                                                                                        763
                                                                                                                                                                                                                                                                                                                                                                                                                                200
                                                                                                                                                                                                                                                                                                                                                                                                                                                         703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 187, Application US/09918715

| Publication No. US20030017157A1 |
| GENERAL INFORMATION: Brad St. Croix |
| APPLICANT: Renneth Kinzler |
| TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS |
| FILE REFERENCE: 1107.00134 |
| CURRENT APPLICATION NUMBER: US/09/918,715 |
| CURRENT FILING DATE: 2001-08-01 |
| PRIOR APPLICATION NUMBER: 60/222,599 |
| PRIOR APPLICATION NUMBER: 60/224,360 |
| PRIOR APPLICATION NUMBER: 60/224,360 |
| PRIOR FILING DATE: 2000-08-11 |
| PRIOR FILING DATE: 2000-04-11 |
| PRIOR APPLICATION NUMBER: 60/282,850 |
| PRIOR FILING DATE: 2000-04-11 |
| NUMBER OF SEQ ID NOS: 358 |
| SOFTWARE: FREESEQ for Windows Version 3.0 |
| SEQ ID NO 187 |
| LENGTH: 564 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment :
Pred. No.:
                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 2
US-09-918-715-187
                                         B
                                                                     á
                                                                                                밁
                                                                                                                                                밁
                                                                                                                                                                   S
                                                                                                                                                                                               밁
                                                                                                                                                                                                               S
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                         뮍
                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: Homo
US-09-918-715-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                 5
                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-1 (1-1414) x US-09-918-715-187 (1-564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                         584
                                                  141
                                                                                                 121
                                                                                                                        464
                                                                                                                                                101
                                                                                                                                                                       404
                                                                                                                                                                                                                      344
                                                                                                                                                                                                                                                                      284
                                                                                                                                                                                                                                                                                                                     224
                                                                                                                                                                                                                                                                                                                                                                      164
   161
                                                                                                                                                                                                81
                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                                                                              GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                           GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                             CTGGTGCTCATCTGCGCCGGGCAAGGGGGGCGCAGGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                             MetAlaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
                                              ACAGCCAGCGTCATCATTGCTTTGACTGAGTGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                          ATGGCCACGGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GluSerGluGluAsnLysIleLys
 SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                       TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.3e-168
1894.00
100.00%
100.00%
74.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0000
64
4
                                                                                                                                                                                                                       403
                                                                                                                                                                                                                                                80
                                                                                                                                                                                                                                                                                                                                                                                                                     163
```

망

Ş В Ś 밁 Ś 밁

유

S

180 643 160 583 140 120 463 100 343 60 283 40 20

밁

á 밁 Ś DЬ Ş 밁 ş 밁 Ś á

밁 ঠ g S á 밁 ঠ 밁 Ś 밁 δ

밁

음 성

```
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/09/918,715
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR PILING DATE: 2000-08-02
PRIOR PILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-08-11
PRIOR FILING DATE: 2000-08-11
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 232
LENGTH: 564
TYPE: PRT
ORGANISM: Homo Bapiens
                                                                                                                                                                                                                                     RESULT 3
US-09-918-715-232
; Sequence 232, Application US/09918715
; Publication No. US20030017157A1
; GENERAL INFORMATION:
                         Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                              ફ
                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                            APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelste
APPLICANT: Kenneth Kinzl
                                                                                                                                                                                                                                                                                                             1184
                                                                                                                                                                                                                                                                                                                                              1124
                                                                                                                                                                                                                                                                                                                                                                                 1064
                                                                                                                                                                                                                                                                                                                             341
                                                                                                                                                                                                                                                                                                                                                                321
                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                   1004
                                                                                                                                                                                                                                                                                                                                                                                                                                     281
                                                                                                                                                                                                                                                                                                                                                                                                                                                    944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 644
                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGAGTGAGGAA
                                                                                                                                                                                                                                                                                                                            TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCCTGCCGAG 1183
                                                                                                                                                                                                                                                                                                                                                                SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                                                                                                                                                                                                                                                                                                                                                                        TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCAATGACTCGGTCACACTCAATGAGAAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                            GluserGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
1.3e-168
1894.00
100.00%
100.00%
74.57%
                                                                                                                                                                                                                                                                                                            1195
Length:
Matches:
Conservative:
Mismatches:
Indels:
00000
                                                                                                                                                                                                                                                                                                                                                                                1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1003
                                                                                                                                                                                                                                                                                                                                                                                                    320
                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
            밁
                              δ
                                                               र्
                                                                               닭
                                                                                                  8
                                                                                                                  닭
                                                                                                                                    5
                                                                                                                                                         밁
                                                                                                                                                                       중 유
                                                                                                                                                                                                          S
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-1 (1-1414) x US-09-918-715-232 (1-564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB:
  1124
                                                                      1004
                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                   644
                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                      584
                                                                                                                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                          464
                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       164
                  321
                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                             404
                                                                                                                                                                                                                                                                                                                                                                                                                                                              344
                                                                                                                         261
                                                                                                                                         884
                                                                                                                                                            241
                                                                                                                                                                                              221
                                                                                                                                                                                                              764
                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                 704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    224
                                                                                                                                                                                                                                                                                                                                                                                                                                               18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                         GTGAGAGAAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                             ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                               ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                         CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGTGCTCATCTGCGCCGGGCAAGGGGGGCGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                    ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                     TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                  SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                            TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTTGG 1123
                                                                       1063
    1183
                                                       320
                                                                                                          1003
                                                                                                                                                                                                                                                                                                                                                                           140
                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                403
                    340
                                                                                        300
                                                                                                                           280
                                                                                                                                           943
                                                                                                                                                             260
                                                                                                                                                                             883
                                                                                                                                                                                                240
                                                                                                                                                                                                                823
                                                                                                                                                                                                                                  220
                                                                                                                                                                                                                                                  763
                                                                                                                                                                                                                                                                     200
                                                                                                                                                                                                                                                                                    703
                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                       643
                                                                                                                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                                                                                                          583
                                                                                                                                                                                                                                                                                                                                                                                            523
                                                                                                                                                                                                                                                                                                                                                                                                                              463
                                                                                                                                                                                                                                                                                                                                                                                                                                                100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
```

```
APPLICANT: FILLIGIALAM.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, KITS, AND
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPMO1-02592RNM
CURRENT APPLICATION NUMBER: US/10/301,822
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR FILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 199
LENGTH: 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 199, Application US/10301822
Publication No. US20030148410A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals, In
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Monahan, John E.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Thibodeau, Stephen N.
                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                         밁
                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                밁
                                                                                             ફ
                                                                                                                           밁
                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo Sapiens
US-10-301-822-199
                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-1 (1-1414) x US-10-301-822-199 (1-564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1184
                                   404
                                                                                             344
                                                                                                                                                          284
                                                                                                                                                                                                                       224
                                                                                                                                                                                                                                                                                   164
      101
                                                                                                                                                                                                                                                                                                                                                104 ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                81
                                                                                                                           61
                                                                                                                                                                                         41
                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAGTGAGGAA 1195
                                                                                                                                                                                                                                                                                                                GluserGluGlu 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                       GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                               GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                    LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                       CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                        1.3e-168
1894.00
100.00%
100.00%
74.57%
                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                             364
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PREVENTION,
                                   463
                                                                   100
                                                                                                403
                                                                                                                               80
                                                                                                                                                                                          60
                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                   20
Sequence 1823, Application US/10408765A

Publication No. US20040101874A1

GENERAL INFORMATION:

APPLICANT: Ghosh, Soumitra S.

APPLICANT: Tahy, Boin D.

APPLICANT: Tahang, Bing

APPLICANT: Tahang, Bing

APPLICANT: Tahang, Bing

APPLICANT: Glosn, Bradford W.

APPLICANT: Glosn, Gary M.

APPLICANT: Warnock, Dale E.

TITLE OF INVENTION: TARGETS FOR THERAPEUTIC INTERVENTION

TITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME

FILE REFERENCE: 660088.465

CURRENT APPLICATION NUMBER: US/10/408,765A

CURRENT FILING DATE: 2003-04-04

NUMBER OF SEQ ID NOS: 3077

SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                    US-10-408-765A-1823
                                                                                                                                                                                                                                                                                                                                                                                                                           1124
                                                                                                                                                                                                                                                                                                                                 1184 GAGAGTGAGGAA 1195
|||||||||||
361 GluSerGluGlu 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                           TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCATCCTGGCCATCGCCCTGCTGCTGCTCCTAGCCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ValargGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            703
```

```
; LENGTH: 564
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-765A-1823
                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
Pred. No.:
Score:
                                                                                밁
                                                                                                                             음 성
                                                                                                                                                    g
                                                                                                                                                               Ş
                                                                                                                                                                              밁
                                                                                                                                                                                       Ś
                                                                                                                                                                                                     밁
                                                                                                                                                                                                             ð
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                             US-09-970-076-1 (1-1414) x US-10-408-765A-1823 (1-564)
                          문
                                                                     ঠ
                                                                                            ঠ
                                                                                                          음 중
      ş
                 밁
                                                                                                                                                                                                    101
                                                                                                                                                        141
                                                                                                                                                                   524
                                                                                                                                                                                                                404
                                                                                                                                                                                                                                       344
                                                                                                                                                                                                                                                              284
                                                   824
                                                             221
                                                                                                           181
                                                                                                                      644
                                                                                                                                  161
                                                                                                                                            584
                                                                                                                                                                               121
                                                                                                                                                                                          464
                                                                                                                                                                                                                                                                                   224
                                                                                                                                                                                                                                                                                                          164
                                                                                                                                                                                                                                                                                                                                 104
                                                                         764
                                                                                    201
                                                                                               704
       944
                  261
                            884
                                       241
                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                      _
                                                                                                                                                                                                                                                                       GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                              CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                              TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAA 403
                                                                                                                                                                                                                                                 GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                    ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT 583
                                       TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                 ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                             1.3e-168
1894.00
100.00%
100.00%
74.57%
                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                       0000
                                                                                                                                                                               140
                                                                                                                                  180
                                                                                                                                                                                           523
                                                                                                                                                                                                                                                                                                40
                                                               240
                                                                                     220
                                                                                                763
                                                                                                            200
                                                                                                                                             643
                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                     283
                                                                                                                                                                                                                                                                                                                       20
       1003
                                                                          823
                                                                                                                       703
                                                                                                                                                                                                                                                                                                                                                                                                                        닭
        맑
                                                                                                                                                                                                                                                                                                                                                                                                                        281
        81
        SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu 100
```

\$ &	D.	Ş	B 8	B &	Db \$	us-09-9	Alignment Pred. No. Score: Percent S: Best Loca. Query Mato	RESULT US-10-4 ; Seque ; Publi; ; GENER ; Publi; ; GENER ; APPI ; APPI ; APPI ; APPI ; APPI ; PILE ; PILE ; PILE ; PRIC ;	Ş	당	Ş	B 5	9	B 8	рь	
344 TCCTTTATTCTTTTTCTRCCCCGAGGAACAXCCTTAATGAAACTGACAGAGAGAGAGAGAA 403 	IleSerProGlnLeuArgMet 8	284 GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG 343	224 GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCGGAAT 283 	164 CTGGTGCTCATCTGCGCCGGGCAAGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC 223		70-076-	tt Scores: 1.3e-168 ),: 1894.00 Similarity: 100.00% sal Similarity: 100.00% 14.57%	RESULT 6 US-10-474-794-187 US-10-474-794-187 Sequence 187, Application US/10474794 Publication No. US20040213793A1 GENERAL INFORMATION: APPLICANT: St. Croix, Brad APPLICANT: St. Croix, Brad APPLICANT: Kinzler, Kenneth TITLE OF INVENTION: FILE REFERENCE: 1107.00179 CURRENT APPLICATION NUMBER: US/10/474,794 CURRENT APPLICATION NUMBER: 60/282,850 PRIOR APPLICATION NUMBER: 60/282,850 PRIOR FILING DATE: 2001-04-11 PRIOR APPLICATION NUMBER: 60/308,829 PRIOR FILING DATE: 2001-04-04 PRIOR APPLICATION NUMBER: 60/308,829 PRIOR FILING DATE: 2001-08-01 NUMBER OF SEQ ID NOS: 359 SEQ ID NO 187 LENGTH: 564 TYPE: PRT ORGANLEM: Homo sapiens US-10-474-794-187	84 GAGAGTGAGGAA 1	341 TrpPheTrpProLeuCysCysThrValIleIleLysGluValProProProProAlaGlu 360	1124 TGGTTCTGGCCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1183	321 SerieLeuAlaileAlaLeuLeuileLeuPheLeuLeuAlaLeuAlaLeuLeuTrp 3	TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG 1	1004 GANGGCURTTATUTCAGTITUTGAGTATAA AAAA TATU TAAAAA 1911 TAAAAAA 1911 TAAAAAA 1911 TAAAAAAAAA 1911 TAAAAAAAAAA	281 CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn 300	

유

밁 S 밁 δ 밁 Ş

```
RESULT 7
US-10-474-794-232
US-10-474-794-232
Sequence 232, App
publication No. 1
GENERAL INFORMAT!
APPLICANT: Care
APPLICANT: Vogg
APPLICANT: Vogg
APPLICANT: Vinterence:
CURRENT APPLICANT: Vinterence:
CURRENT APPLICANT: FILE REFERENCE:
CURRENT EPLICANT:
FRICR APPLICANT: FILING I
PRIOR APPLICATION PRIOR FILING DAY
PRIOR APPLICATION DAY
PRIOR APPLICATION DAY
Sequence 233, Application US/10474794

Publication No. US20040213793A1

GENERAL INFORMATION:
APPLICANT: Carson-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Vinaler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
                                                                                                                                                                   1184
                                                                                                                                                                                                    1124
                                                                                                                                                                                                                                    1064
                                                                                                                                                                                                                                                                     1004
                                                                                                                                                                                                                   321
                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                     281
                                                                                                                                                                                                                                                                                                   944
                                                                                                                                                                                                                                                                                                                     261
                                                                                                                                                                                                                                                                                                                                     884
                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                    824
                                                                                                                                                                                                                                                                                                                                                                                     221
                                                                                                                                                                                                                                                                                                                                                                                                    764
                                                                                                                                                                                                                                                                                                                                                                                                                     201
                                                                                                                                                                                                                                                                                                                                                                                                                                     704
                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       404
                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                   ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GluSerGluGlu 364
                                                                                                                                                                                   ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                    GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                    GAGAGTGAGGAA 1195
                                                                                                                                                                                                                                                                                    TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                           PATTERNS
                                                                                                                                                                                                                                                                      1063
                                                                                                                                                                                                                                                                                                      1003
                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                      883
                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                      220
                                                                                                                                                                                                                                                                                                                                                                                                                                                      200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                     320
                                                                                                                                                                                                                                                                                                                                                     260
                                                                                                                                                                                                                                                                                                                                                                                                      823
                                                                                                                                                                                                                                                                                                                                                                                                                                      763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment :
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; NUMBER OF SEQ ID NOS: 359
; SOFTWARE: FastSEQ for Windows Version
; SEQ ID NO 232
; LENGTH: 564
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-474-794-232
                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                     뮍
                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                   δ
   유
                            g
                                             Ś
                                                                  밁
                                                                              S
                                                                                                   밁
                                                                                                                5
                                                                                                                                    B
                                                                                                                                               δ
                                                                                                                                                                 문
                                                                                                                                                                               δ
                                                                                                                                                                                                    日
                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                    뮍
                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-1 (1-1414) x US-10-474-794-232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scores:
   261
                                                                                                                                                    644
                                                                                                                                                                                                                    524
                                                                                                                                                                                                                                                     464
                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                      284
                   884
                                                                                   764
                                                                                                     201
                                                                                                                                    181
                                                                                                                                                                    161
                                                                                                                                                                                                      141
                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                     404
                                                                                                                                                                                                                                                                                                                      344
                                                                                                                                                                                                                                                                                                                                                                                      224
                                                                                                                                                                                                                                                                                                                                                                                                                      164
                                                                                                                                                                                                                                                                                                                                                                                                                                                      104 ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                     GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                      CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                     CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                     GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
  ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTCATTTTACTG
                                 GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                   ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                      1.3e-168
1894.00
100.00%
100.00%
74.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (1-564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0000
000
44
                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                      463
                                                                                                                                                                                                                                                                                                                       40
                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                     823
                                                                                                                                      200
                                                                                                                                                                                     643
                                                                                                                                                                                                      160
                                                                                                                                                                                                                     583
                                                                                                                                                                                                                                      140
                                                                                                                                                                                                                                                       523
                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                       100
                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                       283
                                                                                                                                                                                                                                                                                                                                                                                                                       223
                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                   943
                                    260
                                                    883
                                                                     240
                                                                                                     220
                                                                                                                     763
                                                                                                                                                    703
     280
```

중 유

밁

음 성

S

유 성 g 5 밁 S В Ş

δ

밁

유 g 5

```
FILE REFERENCE: 1107.00134

CURRENT APPLICATION NUMBER: US/10/979,159

CURRENT FILING DATE: 2004-11-03

PRIOR APPLICATION NUMBER: US/09/918,715

PRIOR APPLICATION NUMBER: US/09/918,715

PRIOR FILING DATE: 2001-08-01

PRIOR FILING DATE: 2000-08-02

PRIOR PILING DATE: 2000-08-02

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR FILING DATE: 2000-04-11

NUMBER OF SEQ ID NOS: 358

SOFTWARE: FREUSEQ for Windows Version 3.0

SEQ ID NO 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 8
US-10-979-159-187
; Sequence 187, Application US/10979159
; Publication No. US20050142138A1
; GENERAL INFORMATION:
                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                      Ş
                                                                                                            밁
                                                                                                                               ঠ
                                                                                                                                                                                                                 Score:
                                                                                                                                                                                                                                                        ; LENGTH: 564
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-979-159-187
         ð
                             밁
                                                á
                                                                 당
                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                     US-09-970-076-1 (1-1414) x US-10-979-159-187 (1-564)
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
                                                                                                                                                                                                                             8
0
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   944
           284
                                                  224
                                                                                          164
                                                                                                                                  104
                              41
                                                                      2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGAGTGAGGAA 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATGGCCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                    CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspGlyLeuSerPheIleSerSerValIleIleThrThrThrHisCysSerAspGly
GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                     GGCGGATTIGACCIGTACTICATTITGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT 283
                                                                                                            1.3e-168
1894.00
100.00%
100.00%
74.57%
                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                          364
0
0
                              1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                60
                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                δ
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                           RESULT 9
US-10-979-159-232
                                                                                                                         밁
                                                                                                                                       ર્
                                                                                                                                                               문
                                                                                                                                                                                                        밁
                                                                                                                                                                                                                       S
Sequence 232, Application US/10979159
Publication No. US20050142138A1
GENERAL INFORMATION:
APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/10/979,159
                                                                                                                                              1184
                                                                                                                                                                                                                             1064
                                                                                                                                                                                                                                                                    1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                  341
                                                                                                                                                                                                          321
                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                         281
                                                                                                                                                                                                                                                                                                             944
                                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                     884
                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                          201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            404 CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluSerGluGlu
                                                                                                                                    GAGAGTGAGGAA 1195
                                                                                                                                                                  TrpPheTrpProLeuCysCysThrValIleIleLysGluValProProProProAlaGlu
                                                                                                                                                                           TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                   TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                        GlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                        PATTERNS
                                                                                                                                                                                                                               1123
                                                                                                                                                                                                                                                                       1063
                                                                                                                                                                                                                                                                                                                1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80
                                                                                                                                                                                                           340
                                                                                                                                                                                                                                                    320
                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                    280
                                                                                                                                                                                                                                                                                                                                                      943
                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                               883
                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                       823
                                                                                                                                                                                                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              523
```

```
CURRENT FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: US/09/918,715
PRIOR FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-08-11
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 232
LENGTH: 564
TYDE: PRT
ORGANISM: Homo sapiens
US-10-979-159-232
                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                             S
                                                                                                                                                                                     á
                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                           á
                                                                                            밁
                                                                                                                                  밁
                                                                                                                                              5
                                                                                                                                                               밁
                                                                                                                                                                                                       ₽
                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-1 (1-1414) x US-10-979-159-232 (1-564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
         S
                          밁
                                                             밁
                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                             181
                                                                              644
                                                                                                161
                                                                                                                 584
                                                                                                                                    141
                                                                                                                                                    524
                                                                                                                                                                     121
                                                                                                                                                                                       464
                                                                                                                                                                                                        101
                                                                                                                                                                                                                         404
                                                                                                                                                                                                                                                         344
                                                                                                                                                                                                                                                                                             284
                                                                                                                                                                                                                                                                                                                                                                   164
                                                                                                                                                                                                                                                                                                                                                                                                      104
          764
                          201
                                                                                                                                                                                                                                                                                                                                224
                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                                                                                                CTGGTGCTCATCTGCGCCGGGCAAGGGGAGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                      GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                              GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                   MetalaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCACGGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                         SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                         ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                    SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                            GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                       AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                    TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                1.3e-168
1894.00
100.00%
100.00%
74.57%
                                                             uThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                        0000
000
44
                                                                                                180
                                                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                            403
                                                                               703
                                                                                                                  643
                                                                                                                                    160
                                                                                                                                                    583
                                                                                                                                                                     140
                                                                                                                                                                                       523
                                                                                                                                                                                                         120
                                                                                                                                                                                                                         463
                                                                                                                                                                                                                                                                             80
                                                                                                                                                                                                                                                                                              343
                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                     20
           823
                                            763
                                                             200
                                                                                                                                                                                                                                                                                                                                                                 RESULT 10
US-11-047-278-6
                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                            음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유정
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ş
                      δ
                                       멍
                                                            Ś
                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Homo
US-11-047-278-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                   Score:
                                                                                                                                             Pred.
                                                                                                                                                    Alignment
                                                                                                                                             No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1064
                                                                                                                                                                                                                                                                                                                                                                                                               1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1004
                                                                                                                                                     Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              824
                            164
                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              221
                                                              104
           21
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 6, Application US/11047278

Publication No. US20050196407A1

GENERAL INFORMATION:

APPLICANT: Young, John A.T.

APPLICANT: Bradley, Kenneth A.

APPLICANT: Collier, Robert J.

APPLICANT: Mogridge, Jeremy S.

TITLE OF INVENTION: Anthrax Toxin Receptor

FILE REFERENCE: 960296.97745

CURRENT APPLICATION NUMBER: US/11/047,278

CURRENT FILING DATE: 2005-01-31

PRIOR APPLICATION NUMBER: US/9970,076

PRIOR APPLICATION NUMBER: 05/251,481

PRIOR APPLICATION NUMBER: 60/251,481

PRIOR FILING DATE: 2000-12-05

PRIOR FILING DA
                                                                                                                                                                                                                                             US-09-970-076-1 (1-1414) x US-11-047-278-6 (1-564)
CTGGTGCTCATCTGCGCCGGGCAAGGGGAGGACGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                   ValargGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAGTGAGGAA 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluSerGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                        1.3e-168
1894.00
100.00%
100.00%
74.57%
6
                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                        Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
         40
                                                                    223
                                                                                                                            20
                                                                                                                                                                                        163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         260
```

```
RESULT 11
US-09-833-245-621
y Sequence 621, Application US/09833245
y Publication No. US20040010134A1
y GENERAL INFORMATION:
                                                      8 8 8 8
                                                                                                    음 성 음
                                                                                                                                        ş
                                                                                                                                                      밁
                                                                                                                                                               ş
                                                                                                                                                                           8
                                                                                                                                                                                      ş
                                                                                                                                                                                                     음 중
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                            ક
                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                    ફ
                                                                                                                                                                                                                                                                                              용
                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                ર્
                                          ર્
                                    밁
                                              1184
                                                                      1124
                                                                                             1064
                                                                                                                     1004
                                                         341
                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                              524
                                                                                 321
                                                                                                         301
                                                                                                                                                                   884
                                                                                                                                                                                          824
                                                                                                                                                                                                                764
                                                                                                                                                                                                                                                               644
                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                        584
                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                      464
                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                             404
                                                                                                                                                                                                                                                                                                                                                                                     344
                                                                                                                                                                                                                                                                                                                                                                                                                                    224
                                                                                                                               281
                                                                                                                                           944
                                                                                                                                                       261
                                                                                                                                                                              241
                                                                                                                                                                                                      221
                                                                                                                                                                                                                             201
                                                                                                                                                                                                                                         704
                                    361
                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                  ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                 CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                             CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                         GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                        GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                     9
                                               GAGAGTGAGGAA
                                                          ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                   1195
                                                                      1183
                                                                                                                                                                                                                                                               703
                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                               583
                                                                                                                                                                                                                                                                                                                           140
                                                                                                                                                                                                                                                                                                                                                                          100
                                                            360
                                                                                  340
                                                                                                                                300
                                                                                                                                                        280
                                                                                                                                                                    943
                                                                                                                                                                                260
                                                                                                                                                                                           883
                                                                                                                                                                                                       240
                                                                                                                                                                                                                   823
                                                                                                                                                                                                                              220
                                                                                                                                                                                                                                          763
                                                                                                                                                                                                                                                     200
                                                                                                                                                                                                                                                                                         643
                                                                                                                                                                                                                                                                                                     160
                                                                                                                                                                                                                                                                                                                                       523
                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                              463
                                                                                                                                                                                                                                                                                                                                                                                      403
                                                                                                                                                                                                                                                                                                                                                                                                 90
                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                               APPLICANT: Human Genome Sciences, Inc.
FILE REFERENCE: PF546PCT
CURRENT APPLICATION NUMBER: US/09/833,245
CURRENT FILING DATE: 2001-04-12
PRIOR APPLICATION NUMBER: 60/229, 358
PRIOR APPLICATION NUMBER: 60/229, 358
PRIOR FILING DATE: 2000-04-12
PRIOR PHILING DATE: 2000-12-61
PRIOR APPLICATION NUMBER: 60/256, 931
PRIOR FILING DATE: 2000-12-21
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR FILING DATE: 2000-04-25
NUMBER: OF SEQ ID NOS: 2267
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 621
LENGTH: 403
TYPE: PRT
ORGANISM: Homo sapiens
US-09-833-245-621
                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                               멼
                                                                                                                       닭
                                                                                                                                  δ
                                                                                                                                                  멍
                                                                                                                                                          5
                                                                                                                                                                      밁
                                                                                                                                                                                  S
                                                                                                                                                                                                밁
                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                          Score:
       뭐
               S
                            음 성
                                                 뮍
                                                             á
                                                                            밁
                                                                                     δ
                                                                                                 밁
                                                                                                           5
                                                                                                                                                                                                                                                                       US-09-970-076-1 (1-1414)
                                                                                                                                                                                                                                                                                                                No.:
                                                                                                                                                                                                                                                                                                                      Scores:
                               181
                                                      161
                                                                 584
                                                                                         524
                                                                                                    121
                                                                                                                464
                                                                                                                           101
                                                                                                                                      404
                                                                                                                                                              344
                                                                                                                                                                                      284
                                                                                                                                                                                                                                    164
        201
                                                                                                                                                                           2
                                                                                                                                                                                                  41
                                                                                                                                                   81
                                                                                                                                                                                                                         21
                                                                                                                                                                         GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                        CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                               ACAGCCAGCGTCATTCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                   3.39e-168
1889.00
100.00%
100.00%
74.37%
                                                                                                                                                                                                                                                                       x US-09-833-245-621 (1-403)
                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
```

OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids   NAME/KEY: SITE	ט סיסיסיסיסיסיסיסיסיסיסיסיסיסיסיסיסיסיסי	ESULT 12 Sol Gluserigin 303 ESQUENCE 620, Application US/098332 Sequence 620, Application US/098332 Publication No. US20040010134A1 GENERAL INFORMATION: APPLICANT: Human Genome Sciences, TITLE OF INVENTION: Albumin Fusion FILE REFERENCE: PF546FCT CURRENT APPLICATION UMBER: US/09/ CURRENT FILING DATE: 2001-04-12	1064 TCCATCCTGG	Oy  88 AICANIGATICGETCACACICAMIGAGACCCTITICINGGAAGACCACITATITACING 943  261 IleABNASSETVAIThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu 280  261 IleABNASSETVAIThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu 280  94 TGTCCAGCCCTATCTTAAAAGAAGTTGGCATGAAAGCTCCAGCTCAGCATGAAC 1003  QY  94 TGTCCAGCCCTATCTTAAAAGAAGTTGGCATGAAAGCTTCCAGGTCAGCATGAAC 1003  281 CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn 300  QY  1004 GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCACCACCACACTGTTCTGACGGT 1063  QI	764 ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
884 ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGGGAAGACACTTATTACTGGIIIIIIIIII	Qy  644 AAAGATTTCAATGAGACACAGGCTGGCGGACAGTAAGGATCATGTGTTCCC 703	10 ANAGALI I GARAGOS CARLING CARLING STATION OF THE CARLING STATION	61 ĠiuiieTyrTyrPhevaiĠiuĠinLeuAlaHisLysPheileSerProĠinLeuArgMet 8 344 TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA 4	### RETAINT ALB GLUAR TYPE ALB LEGGE TO THE PROPERTY PROGES TO THE PROPERTY PROFESSION OF THE PROPERTY PROFESSION OF THE PROPERTY PROFESSION OF THE PROFESSI	st Local Similarity: 99.17% Mismatches: 3 ery Match: 73.62% Indels: 0 : Gaps: 0 -09-970-076-1 (1-1414) x US-09-833-245-620 (1-403)  104 ATGGCCACGGGGAGGGGGAGAGCCCTCGGCATCCAGTGGCTCTTTTGGCCACT 1

```
APPLICANT: Brad St. Croix
APPLICANT: Berd St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
ITITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/09/918,715
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR PILING DATE: 2000-04-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR PILING DATE: 2000-04-11
PRIOR APPLICATION SCHOOL STEEL STEEL STEEL SCHOOL STEEL SCHOOL STEEL SCHOOL STEEL SCHOOL STEEL SCHOOL SCHO
                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 13
US-09-918-715-194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 562
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-918-715-194
                밁
                                       á
                                                                               밁
                                                                                                         ફ
                                                                                                                                                  8
                                                                                                                                                                             ş
                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-1 (1-1414) x US-09-918-715-194 (1-562)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 194, Application US/09918715
Publication No. US20030017157A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                127
                                               488
                                                                                 107
                                                                                                                  428
                                                                                                                                                                                     368
                                                                                                                                                                                                                                                        308
                                                                                                                                                                                                                                                                                                                             248
                                                                                                                                                                                                                                                                                                                                                                                                 188
                                                                                                                                                                                                                                                                                          47
                                                                                                                                                    87
                                                                                                                                                                                                                       67
                                                                                                                                                                                                                                                                                                                                                               27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluserGlu 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAGTGAG
            GlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrtheIle
                                                                                                                                                                                                                                                                                                                                                                               GGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCATT
                                                                                                 GGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCCTAGAAGAA 427
                                                                                                                                                                                                                                      TIGGCTCACAAATICATCAGCCCACAGTIGAGAATGTCCTITATIGITTITCTCCACCCGA 367
                                                                                                                                                                                                                       LeuGlnLyaValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.05e-159
1793.00
97.75%
96.07%
70.59%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1183
                                                                                                                                                                                                                                                                                                                                                                                                 247
                146
                                                  547
                                                                                     126
                                                                                                                                                        106
                                                                                                                                                                                                                           98
                                                                                                                                                                                                                                                                                              66
                                                                                                                                                                                                                                                                                                                                                                   46
                                                                                                                                                  Sequence 301, Application US/09918715

Publication No. US20030017157A1

GENERAL INFORMATION:

APPLICANT: Brad St. Croix

APPLICANT: Bert Vogelstein

APPLICANT: Kenneth Kinzler

TITLE OF INVENTION: ENDOTHERIAL CELL EXPRESSION PATERIES OF INVENTION: ENDOTHERIAL CELL EXPRESSION PATERIES OF INVENTION NUMBER: US/09/918,715

CURRENT FILING DATE: 2001-08-01

PRIOR APPLICATION NUMBER: 60/22,599

PRIOR FILING DATE: 2000-08-02

PRIOR FILING DATE: 2000-08-11

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR FILING DATE: 2000-08-11

PRIOR PRIOR FILING DATE: 2000-08-11

PRIOR FILING DATE: 2000-04-11

NUMBER OF SEG ID NOS: 358

SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
Alignment Scores: Pred. No.: Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-918-715-301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                    ; ORGANISM: Mouse US-09-918-715-301
                                                                                                     SEQ ID NO 301
LENGTH: 562
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAGATCTTGGTGCAATTGTTTACTGTGTTGGGGTGAAAGATTTCAATGAGACACAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValileIleLysGluValProProProProValGluGluSerGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAA 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ValLeuPheLeuLeuAlaLeuAlaLeuLeuTrpTrpPheTrpProLeuCysCysThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCCGGATTGCGGACAGTAAGGATCATGTTTTCCCCGTGAATGACGGCTTTTCAGGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSerSer
 4.05e-159
1793.00
   Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                      PATTERNS
     562
342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 967
```

362

```
ф
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                     밁
                                                                                                                         S
                                                                                                                                                               Ś
                                                                                                                                                                                  멍
                                                                                                                                                                                                       5
                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
          ક
                             밁
                                            S
                                                                    밁
                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-1 (1-1414) x US-09-918-715-301 (1-562)
                                                 1028
                                                                    287
                                                                                       968
                                                                                                          267
                                                                                                                                                 247
                                                                                                                                                                     848
                                                                                                                                                                                        227
                                                                                                                                                                                                                                                                     187
                                                                                                                                                                                                                                                                                        899
                                                                                                                                                                                                                                                                                                            167
                                                                                                                                                                                                                                                                                                                               809
                                                                                                                                                                                                                                                                                                                                                  147
                                                                                                                                                                                                                                                                                                                                                                      548
                                                                                                                                                                                                                                                                                                                                                                                         127
                                                                                                                                                                                                                                                                                                                                                                                                            488
                                                                                                                                                                                                                                                                                                                                                                                                                                107
                                                                                                                                                                                                                                                                                                                                                                                                                                                  428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             188
                                                                                                                                                                                                           788
                                                                                                                                                                                                                               207
                                                                                                                                                                                                                                                 728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAA
CGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAGCTG
                                                                                                                                                                                                                                                                                                                                                           ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAATAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                    CTCCAGAAAGTTCTGCCAGGAGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCACCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCCGCAACGTGGACAGGGTCCTCCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAAT
                                                                                                                                                                                                                               GlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGluPro
                                                                                                                                                                                                                                         CAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCA
                                                                                                                                                                                                                                                                     GCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTG
                                                                                                                                                                                                                                                                                                                                                 ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSer
                                                                                                                                                                                                                                                                                                                                                                                        GluGlnIleTyrTyrGluAsnSerGlnGlyTyrArgThrAlaSerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                               LeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuAlaHisArgPheIleSerProGlnLeuArgMetSerPheIleValPheSerThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97.75%
96.07%
70.59%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0000
                                                 1087
                                                                                       1027
                                                                     306
                                                                                                           286
                                                                                                                                                  266
                                                                                                                                                                                        246
                                                                                                                                                                                                                                226
                                                                                                                                                                                                                                                  787
                                                                                                                                                                                                                                                                      206
                                                                                                                                                                                                                                                                                                             186
                                                                                                                                                                                                                                                                                                                                667
                                                                                                                                                                                                                                                                                                                                                                      607
                                                                                                                                                                                                                                                                                                                                                                                         146
                                                                                                                                                                                                                                                                                                                                                                                                            547
                                                                                                                                                                                                                                                                                                                                                                                                                                 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                    487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99
                                                                                                                                                                     907
                                                                                                                                                                                                                                                                                         727
                                                                                                                                                                                                                                                                                                                                                   166
                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15

US-10-474-794-194

Sequence 194, Application US/10474794

PUBLICATION NO. US20040213793A1

GENERAL INFORMATION:
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
FILLE OF INVENTION ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107.00179

CURRENT APPLICATION NUMBER: US/10/474,794

CURRENT APPLICATION NUMBER: 60/282,850

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR FILING DATE: 2001-04-11

PRIOR APPLICATION NUMBER: 66/308,829

PRIOR FILING DATE: 2001-08-01

VOMBER OF SEQ ID NOS: 359

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 194

US-10-474-794-194
                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                               Ś
                                                                                                                                                                                   8
                                                                                                                                                                                                            밁
                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                        Ś
                        δ
                                            밁
                                                                Ś
                                                                                       밁
                                                                                                     Ş
                                                                                                                            밁
                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                US-09-970-076-1 (1-1414) x US-10-474-794-194 (1-562)
                                                                                                                                                                                                                                                                                                                                                                                           Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  347
                                                                      488
                                                                                                                                                 368
                                                                                                                                                                                        308
                                                                                                                                                                                                                                                                       188
                                                                                        107
                                                                                                           428
                                                                                                                               87
                                                                                                                                                                     67
                                                                                                                                                                                                            47
                                                                                                                                                                                                                                                   27
                                                                                                                                                                                                                                                                                          7
                                                                                                                                                                                                                                                             GGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCATT
                                                                                                                                                                                                                                                                                        ValIleIleLysGluValProProProProValGluGluSerGluGlu
                                                                                                                                                                    TTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCACCCGA
                                                                                                                                                                                                            GlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPheIle
                                                                                                                                                                                                                                                                                                  CTCGGCATCGGCTTCCAGTGGCTCTTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAA 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValLeuPheLeuLeuAlaLeuAlaLeuLeuTrpTrpPheTrpProLeuCysCysThr
                                                GGAACAACCTTAATGAAACTGACAGAAGACAGAGACAAATCCGTCAAGGCCTAGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAA 1195
            ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSer
                    LeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSer
                                                                                                                               GlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGlu
                                                                                                                                                                                                                                                                                                                                                            4.05e-159
1793.00
97.75%
96.07%
70.59%
                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PATTERNS
```

562 6 42 0 2

607 146

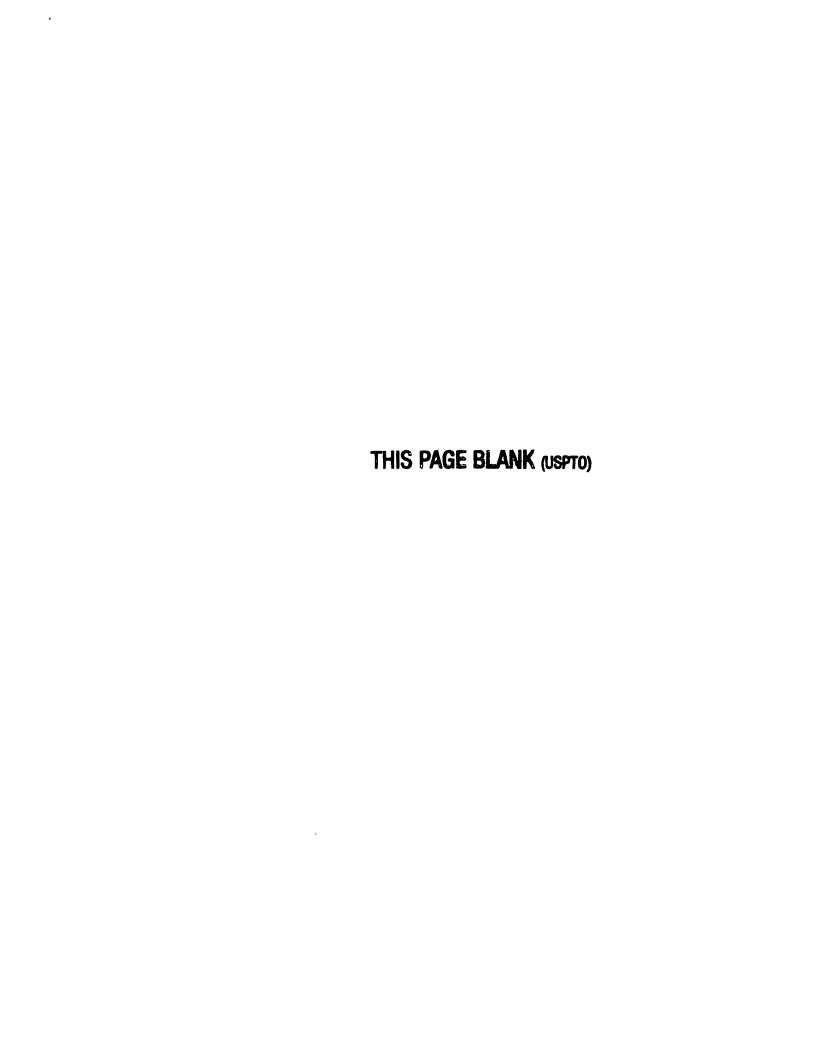
166

126 487 106 427 367 66 307

8

247 26

Searc	탕	Ş	문	ঠ	용	ş	문	Ş	문	ş	岁	Ş	岁	Ş	Вb	ફ	문	ફ	DЬ	Ş
Search completed:   Job time : 230.268	347	1148	327	1088	307	1028	287	968	267	908	247	848	227	788	207	728	187	668	167	608
ited: December 14, 2005, 12:54:52     0.268   secs	vallleIleLysGluValProProProProProValGluSerGluGlu 362	GTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAA 1195	ValLeuPheLeuLeuAeuAlaLeuAlaLeuTrpTrpPheTrpProLeuCysCysThr 346	ATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTGCTGCACT 1147	ServalileileThrThrHisCysSerAspGlySerIleLeuAlaileAlaLeuLeu 326	TCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTG 1087	ValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSerSer 306	GTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAGT 1027	GluLysProPheAlaValGluAspThrTyrLeuLeuCysProAlaProIleLeuLysGlu 286	GAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCCTATCTTAAAAAGAA 967	AlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeuAsn 266	GCCCGCAACGTGGACAGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAAT 907	SerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArgHis 246		GlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGluPro 226	CAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCCTAGCAGCAGCTGAACCA 787	AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu 206	GCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCAGGCTCTG 727	ArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGlnLeu 186	CGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACACCTG 667
				7		7		7												



```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OM nucleic - protein search, using frame_plus_n2p model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -MODEL-frame+ n2p.model -DEV=xlp
-MODEL-frame+ n2p.model -DEV=xlp
-Q-/cgn2 1/USFTO spool p/US09970076/runat 14122005 110512 26598/app_query.fasta_1.2894
-Q-/cgn2 1/USFTO spool p/US09970076/runat 14122005 110512 26598/app_query.fasta_1.2894
-DB-PublIshed Applications AA New -QFMT=fastan -SUFFIX=rapbn -MINWATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -STRAT=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DCCALIGN=200 -THR SCORE=pct -THR MAX=100
-THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=200000000 -USER=US09970076 @CGN 1 1 1 @runat 14122005 110512 26598
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -MODEL=frame+_n2p.model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95
                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
       145.5
126.5
126.5
126.5
113.5
113.5
                                                                                                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Published_Applications_AA_New:*

1: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:*

8: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-1
2540
1 aggacccgcgagga
                                                                                                                                                                                                                                                   Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51441 seqs, 6734002 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 December 14, 2005, 11:59:39; Search time 7.30024 Seconds
                                                                                                                                                                                                                                                                                Query
                          74.6
5.7
5.0
5.0
4.7
4.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aggacccgcgaggaagggcc.....
                          564
1152
3063
739
764
798
761
915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
US-11-186-284-199

US-11-186-284-26

US-11-186-284-26

US-11-057-047-2

US-11-057-047-1

US-10-821-234-1034

US-11-057-047-6

US-11-131-8248-294

US-11-131-424-39

US-11-601-368-24
                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (without alignments)
2608.649 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aaaaaaaaaaaaaaaaaa 1414
  Sequence 199, App
Sequence 4, Appli
Sequence 26, Appli
Sequence 2, Appli
Sequence 1, Appli
Sequence 1034, App
Sequence 6, Appli
Sequence 294, Appl
Sequence 39, Appl
Sequence 24, Appl
                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1
US-11-186-284-199
```

## ALIGNMENTS

```
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: MOTEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PRE
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MEMO1-029P2RNM
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US/0/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
; ORGANISM: Homo Sapiens
US-11-186-284-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 199, Application No. US20
GENERAL INFORMATION
                                                                                       SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 199
LENGTH: 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Millennium Pharmaceuticals, Inc. APPLICANT: Berger, Allison APPLICANT: Guillemette, Tracy L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                            NUMBER OF SEQ ID NOS:
                                                               LENGTH: 56
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kamatkar, Shubhangi
Schlegel, Robert
Monahan, John E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/11186284
o. US20050266493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PREVENTION,
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                   밁
                                                                                                                                           밁
                                                                                                                                                             Ş
                                                                                                                                                                              유
                                                                                                                                                                                                           В
                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                        밁
                                     á
                                                     밁
                                                                   ş
                                                                                밁
                                                                                               á
                                                                                                                            S
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-1 (1-1414) x US-11-186-284-199 (1-564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
Pred. No.:
                        281
                                      944
                                                      261
                                                                                                   824
                                                                                                                    221
                                                                                                                                  764
                                                                                                                                                 201
                                                                                                                                                                704
                                                                                                                                                                               181
                                                                                                                                                                                              644
                                                                                                                                                                                                             161
                                                                                                                                                                                                                             584
                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                           524
                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                         464
                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                       404
                                                                                                                                                                                                                                                                                                                                                      344
                                                                                                                                                                                                                                                                                                                                                                                     284
                                                                                                                                                                                                                                                                                                                                                                                                                   224
                                                                                                                                                                                                                                                                                                                                                                                                                                                 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                104
                                                                                    241
                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                     13
                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                  GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGTGCTCATCTGCGCCGGGCAAGGGGAGGATGGGGATGCCAGCCTGCTAC
                      ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                  SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                          ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                        GlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                 CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGGAGACACTTACATG
GATGGCCTCTTTTATCTCCAGTTCTGTCATCACCACCACACACTGTTCTGACGGT
                                                                                    ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                             GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                           ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                              LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                         AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                             TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.24e-162
1894.00
100.00%
100.00%
74.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0 0 0 0 0
                                                                                                                                                                                                              180
                                                                                     260
                                                                                                    883
                                                                                                                    240
                                                                                                                                                 220
                                                                                                                                                                                                                             643
                                                                                                                                                                                                                                            160
                                                                                                                                                                                                                                                                           140
                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                        463
                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                       403
                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                   283
                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                   823
                                                                                                                                                                763
                                                                                                                                                                                200
                                                                                                                                                                                              703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 2
US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                   S
                                                                     밁
                                                                                 Ś
                                                                                                   밁
                                                                                                                 Ś
                                                                                                                                  밁
                                                                                                                                              á
                                                                                                                                                                밁
                                                                                                                                                                              S
                                  P
D
                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                    No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                      200
                                                                                                            ::
```

```
APPLICANT: Springer, Timothy A.
APPLICANT: Springer, Timothy A.
APPLICANT: Shimaoka, Motomu
APPLICANT: Lu, Chafen
TITLE OF INVENTION: MODIFIED POLYPEPTIDES STABILIZED IN A
TITLE OF INVENTION: DESIRED CONFORMATION AND METHODS FOR PI
FILL REFERENCE: CFBF-P02-01
CURRENT APPLICATION NUMBER: US/11/080,026
CURRENT APPLICATION NUMBER: 09/945,265
PRIOR APPLICATION NUMBER: 09/945,265
PRIOR FILING DATE: 2001-08-31
FRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 4
SEQ ID NOS 4
SEQ ID NOS 4
LENGTH: 1152
TYPE: PRT
CORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-1 (1-1414) x US-11-080-026-4 (1-1152)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4, Application US/11080026 Publication No. US20050260192A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                               TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCCTCCTCTGG
                                                                                                                                                                                                                                                                              GAGAGTGAGGAA 1195
                                                                                                AAAGTTCTGCCAGGAGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAG
                                                                                                                                                                                                                                   ATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGAC----
                                                                                                                                                                                                                                                                                                                TATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluSerGluGlu 364
LeuPheAsnIleThrAsnGlyAlaArgLysAsnAlaPheLysIleLeuValValIleThr
                                  ATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTGACT
                                                                                                                                  PheThrPheLysGluPheGlnAsnAsnProAsnProArgSerLeuValLysProIleThr
                                                                                                                                                                                                            ThrLeuPheSer---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrHisCysSerAspGly
                                                                     GlnLeuLeu----
                                                                                                                                                                          ----AGAGAACAATCCGTCAAGGCCTAGAAAACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.3e-05
145.50
45.85%
26.20%
5.73%
                                                                  ||| |||:::
-GlyArgThrHisThrAlaThrGlyIleArgLysValValArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                            -||||||::: :::|||:::
-LeuMetGlnTyrSerGluGluPheArgIleHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1152
60
45
81
43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRODUCING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        320
                                     550
                                                                       237
                                                                                                         493
                                                                                                                                           219
                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                184
                                                                                                                                                                                                                                                                                                                                                    169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
     257
                                                                                                                                                                                                                                                397
```

```
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSITITLE OF INVENTION: THERAPY OF COLON CANCER
FILE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPMO1-029PZRNM
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT APPLICATION NUMBER: US/10/301,822
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR APPLICATION NUMBER: US/0039,971
PRIOR APPLICATION NUMBER: US/0039,971
PRIOR APPLICATION NUMBER: US/0039,971
PRIOR APPLICATION NUMBER: US/0031,988
PRIOR FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US/00381,988
PRIOR FILING DATE: 2002-05-20
PRIOR FILING DATE: 2002-05-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 3
US-11-186-284-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                             ঠ
                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Homo
US-11-186-284-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                        밁
                                                                                                                                                                                                                                                         Alignment Scores: Pred. No.:
                                                                                                       US-09-970-076-1 (1-1414) x US-11-186-284-26 (1-3063)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals,
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 26
LENGTH: 3063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 26, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 228
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               295 LysSerArgGlnGluLeuAsnThrIleAlaSerLysProProArgAspHisValPheGln
                        440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Glu-----GlyValIleArgTyrValIleGlyValGlyAspAlaPheArgSerGlu
                        AspIleValPheLeuValAspGlySerTyrSerIleGlyIleAlaAsnPheValLysVal
                                            GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG---CTGCACCACTGGAATGAAATC 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetSerGlnGluGlyPheSerAlaAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGAGGAAACGGCTTCCGACATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCGANATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValAsnAsn---PheGluAlaLeuLysThrIleGlnAsnGlnLeuArgGluLys-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGCCCCGG-----ATTGCGGACAGT-----AAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspGlyGluLysPheGlyAspProLeuGlyTyrGluAspValIleProGluAlaAspArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/11186284
No. US20050266493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ----IlePheAlaIleGluGlyThrGlnThrGlySerSerSerSerPheGluHisGlu
                                                                                                                                                                                                                                                                                                                                           Sapiene
                                                                                                                                                        0.000164
134.50
43.10%
27.93%
5.30%
                                                                                                                                             Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ASSESSMENT, PREVENTION,
                                                                                                                                                    3063
81
44
123
123
                          459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
APPLICANT: Thurman, Joshua
APPLICANT: Taube, Christian
APPLICANT: Galfand, Erwin
APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT APPLICATION NUMBER: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                           US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                               Sequence 2, Application US/11057047 Publication No. US20050260198A1
                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                           APPLICANT: Holers, Vernon APPLICANT: Thurman, Josh APPLICANT: Taube, Christ
                                                                                                                                                                                                                                                                                                                                                                                                                                 1037 ATCACCACCACACTGTTCTGACGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          570 GluIlePheAlaValGlyValLyBAspAlaValArgSerGluLeuGluAlaIleAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             515 GiySerThrAsnThrGlyLysAlaMetThrTyrValArgGiuLysIlePheValProSer
                                                                                                                                                                                                                                                                                                                                                                                           690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  626 AlaIleLysLysLysAlaTyrValProProLysAspLeuSerPheSerGluValThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            797 TGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         683 -----AGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        563 CATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       509 AGACAAGGGTACAGGACA-----GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           449 GGAGACACTTACATGCATGAAGGATTTGAAAGGGCCCAGTGAGCAGATTTATTATGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     500 ValGluAspIleile-------GluAlaIleAsnThrPheProTyrArgGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480 SerLeuValGlnTyrSerArgAspProHisThrGluPheThrLeuLysLysPheThrLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           460 ArgAlaPheLeuGluValLeuValLysSerPheGluIleSerProAsnArgValGlnIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     290 TATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---CAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCA-----GGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerSerAspAlaPhe-----ArgAspProAlaIleLysLeuArgAsnSerAspVal 569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCTTTATTGTTTTCTCCACC------CGAGGAACAACCTTAATGAAACTGACAGAA
                                                                                                                                                                                                                                                                                                                                                                                         rLeuLysProGluThrLeuTyrLeuVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspAspGluValThrVal---ValGluPro-AlaSerSerThrSerValValLeuSerSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tyr------GlypheLysThrAsnTrpSer---ProAlaGlyGluAsnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerPheGluLeuThrGlnSerIleCysLeuArgIle-----GluGlnGluLeuAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProProAlaGluThrHisValPheThrValGluAsp---PheAspAlaPheGlnArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTGTTTACTGTGTGTGTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lys---GlySerArgSerAsnValProLysValMetIleLeuIleThrAspGlyLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATA
                                                                                                                                                                                                                                                                                                                                                                                           699
                                                                                                                                                                                                                                                                                                                                                                                                                                 1064
                                                                                                                                    The Alternative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysGluAlaAlaGly
                                                                                                                                    Complement Pathway and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             803
```

```
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR FILING DATE: 2004-12-14
PRIOR APPLICATION NUMBER: US04/015040
PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn version 3.3
SEQ ID NO 2
LENGTH: 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT ; ORGANISM: Homo sapiens US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-1 (1-1414) x US-11-057-047-2 (1-739)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                        641
                                                                               388
                                                                                                                                                                                                                                    348
                                                                                                                                                                                                                                                                             512
                                                                                                                                                                                                                                                                                                                  331
                                                                                                                                                                                                                                                                                                                                                         467
                                                                                                                                                                                                                                                                                                                                                                                               314
                                                                                                                                                                                                                                                                                                                                                                                                                                    419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      184
  408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlySerTrpSerGlyThrGluProSerCysGlnAspSerPheMetTyrAspThrProGln
                                    ---GTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTG
                                                                           LysAspArgLysAsnProArgGluAspTyrLeuAspValTyrValPheGlyValGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysIleTrpValLysValSerGluAlaAspSerSerAsnAlaAspTrpValThrLysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAACCTTAATGAAACTGACAGAA------GACAGAGAACAAATCCGTCAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleGlyAlaSerAsnPheThrGlyAlaLysLysCysLeuValAsnLeuIleGluLysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glu-----ValAlaGluAlaPheLeuSerSerLeuThrGluThrIle-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGC 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAG 118
LeuValAsnGlnValAsnIleAsnAlaLeuAlaSerLysLysAspAsnGluGlnHisVal
                                                                                                                                                                                                                                                                                                                                                                                                                                    CTAGAAGAACTC------CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGA 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----GluGlyValAspAlaGluAspGlyHisGlyProGlyGluGlnGlnLysArgLys
                                                                                                                    TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTTTGGT---
                                                                                                                                                         AsnMetGlyGlyAspProIleThrValIleAspGluIleArgAspLeuLeuTyrIleGly
                                                                                                                                                                                                                                    ProProGluGlyTrpAsnArgThrArgHisValIleIleLeuMetThrAspGlyLeuHis
                                                                                                                                                                                                                                                                                                                                                         GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGA------
                                                                                                                                                                                                                                                                                                                                                                                             LeuAsnGluIleAsnTyrGluAspHisLysLeuLysSerGlyThrAsnThr------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaSerTyrGlyValLysPro-----ArgTyrGlyLeuValThrTyrAlaThrTyrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----TGCTACGGCGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCGGGCAAGGGGACGCAGGGAGGATGGG---GGTCCAGCC-----
                                                                                                                                                                                                                                                                                                                  ------LysLysAlaLeuGlnAlaValTyrSerMetMetSerTrpProAspAspVal
                                                                                                                                                                                                                                                                           - CAAGGGTAC---AGGACAGCCAGCGTCATCATTGCTTTGACTGATGGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.000586
126.50
37.99%
19.53%
4.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative:
                                                                                                                                                                                               ----GAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       739
74
70
128
107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           235
  427
                                        697
                                                                               407
                                                                                                                    640
                                                                                                                                                                                                                                                                                                                                                         511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: 2848-66
CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR FILING DATE: 2004-02-14
PRIOR APPLICATION NUMBER: US04/015040
PRIOR APPLICATION NUMBER: US04/015040
PRIOR APPLICATION NUMBER: US04/015040
PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn version 3.3
SEQ ID NO 1
                                      밁
                                                                     ş
                                                                                                                    밁
                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-11-057-047-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
  S
                                                                                                                                                                                                                                                       Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo US-11-057-047-1
                                                                                                                                                                                               US-09-970-076-1 (1-1414) x US-11-057-047-1 (1-764)
                                                                                                                                                                                                                                                                                             Percent Similarity:
                                                                                                                                                                                                                                                                                                                    Score
                                                                                                                                                                                                                                                                                                                                        Pred.
                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/11057047
Publication No. US20050260198A1
GENERAL INFORMATION:
APPLICANT: Holers, Vernon
APPLICANT: Thurman, Joshua
APPLICANT: Taube, Christian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The Alternative Complement Pathway and
TITLE OF INVENTION: Methods Related Thereto
                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 76
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                    No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       447
                                        229
                                                                             119 CGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           869
                                                                                                                                                                                                                                                                                                                                                                                                                                                        764
                                                                                                                    GCCGGGCAAGGGGACGCAGGGAGGATGGG----GGTCCAGCC----
                                        Glu-----ValAlaGluAlaPheLeuSerSerLeuThrGluThrIle-----
                                                                                                                                                           GGAGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAG 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----AlaValValSerGluTyrPheValLeuThrAlaAlaHisCys 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGAACGATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGT 1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PheLysValLysAsp----MetGluAsnLeuGluAspValPheTyrGlnMetIleAspGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gelfand, Erwin
                                                                                                                                                                                                                                                                                                                                                                                                                  sapiene
                                                                                                                                                                                                                            0.000591
126.50
37.99%
: 19.53%
4.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -GlyMetValTrpGluHisArgLysGlyThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----TyrHisLysGlnProTrpGlnAlaLysIleSerVal 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -IleArgProSerLysGlyHisGluSerCysMetGly-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ----GlnSerLeuSerLeuCys---------
                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                        764
74
70
128
107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    446
                                          242
                                                                                                                        228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           757
```

밁 Ş

Ş 묽 S 밁 ş 밁 á 밁 ર્ Ś

밁 5 밁 á 밁 δ 밁 Ś 밁 ş 밁

밁

á

```
RESULT 6
US-10-821-234-1034
; Sequence 1034, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
; APPLICANT: Labat, Ivan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              243
                                                                                                                                                                                                                                                                                              490
                                                                                                                                                                                                                                                                                                                                                                        479
                                                                                                                                                                                                                                                                                                                                                                                                                                                   472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       413
                                                                                                                                                                                                                                                       938
                                                                                                                                                                                                                                                                                                                                                                                                             818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       758
                                                                                                                                         514
                                                                                                                                                                           998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysIleTrpValLysValSerGluAlaAspSerSerAsnAlaAspTrpValThrLysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysAspArgLysAsnProArgGluAspTyrLeuAspValTyrValPheGlyValGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuAsnGluIleAsnTyrGluAspHisLysLeuLysSerGlyThrAsnThr------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleGlyAlaSerAenPheThrGlyAlaLysLysCysLeuValAsnLeuIleGluLysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IleValLeuAspProSerGlySerMetAsnIleTyrLeuValLeuAspGlySerAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuValAsnGlnValAsnIleAsnAlaLeuAlaSerLysLysAspAsnGluGlnHisVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AsnMetGlyGlyAspProIleThrValIleAspGluIleArgAspLeuLeuTyrIleGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTAGAAGAACTC------CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAACCTTAATGAAACTGACAGAA------GACAGAGAACAAATCCGTCAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaSerTyrGlyValLysPro-----ArgTyrGlyLeuValThrTyrAlaThrTyrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----GluGlyValAspAlaGluAspGlyHisGlyProGlyGluGlnGlnLysArgLys
                                                                                                                                                                             ATGAACGATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGT
                                                                                                                                                                                                                                                     TTACTGTGTCCAGCGCCTATCTTAMAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGC 997
                                                                                                                                                                                                                                                                                                                                TTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTAT 937
                                                                                                                                                                                                                                                                                                                                                                                                           GTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PheLysValLysAsp---MetGluAsnLeuGluAspValPheTyrGlnMetIleAspGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ------LysLysAlaLeuGlnAlaValTyrSerMetMetSerTrpProAspAspVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    тттсссфтфаатфасфесттельфестстфсальфесателестелаттттвальная
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -GTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----GlnSerLeuSerLeuCys----
                                                                                                                                                                                                                                                                                                                                                                      -GlyMetValTrpGluHisArgLysGlyThrAsp-------
                                                                                                                                                                                                                 ----IleArgProSerLysGlyHisGluSerCysMetGly-----
                                                                                                                                         AlavalvalserGluTyrPheValLeuThrAlaAlaHisCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----GAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTG
                                                                                                                                                                                                                                                                                            ----TyrHisLysGlnProTrpGlnAlaLysIleSerVal 501
                                                                                                                                                                               1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                δ
                                                                                                                                                                   δ
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                         묽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-1 (1-1414) x US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Homo US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Stache-Crain, Birgit
APPLICANT: Andarmani, Susan
APPLICANT: Andarmani, Susan
ITILE OP INVENTION: Methods for Diagnosis and
FILE REFERENCE: 821A
CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR FILING DATE: 2003-04-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 1704
SOFTWARE: pt_SEQ_genes Version 1.0
SEQ ID NO 1034
LENGTH: 798
TYPE: PRT
                          584
                                                                                                                                                                                                                   390
                                                                                                                                                                                                                                                       467
                                                                                                                                                                                                                                                                                                                                  419
                                                                                                                                                                                                                                                                                                                                                                        353
                                                                                                                                                                                                                                                                                                                                                                                                                 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                     335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  243
        TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IleGlyAlaSerAsnPheThrGlyAlaLysLysCysLeuValAsnLeuIleGiuLysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAGCGTGGGAAGGAGCGGACCCTGCTCCCCGGGCTGCGGGCCATGGCCACGGCGGAG
                                                                                                                                                                     -----CAAGGGTAC---AGGACAGCCAGCGTCATTGCTTTGACTGATGGA-----
                                                                                                                                                                                                                                                                                                                                  CTAGAAGAACTC-----CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT 466
                                                                                                                                                                                                                                                                                                                                                                        LysIleTrpValLysValSerGluAlaAspSerSerAsnAlaAspTrpValThrLysGln
                                                                                                                                                                                                                                                                                                                                                                                                               ACAACCTTAATGAAACTGACAGAA------GACAGAGAACAAATCCGTCAAGGC 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AlaSerTyrGlyValLysPro-----ArgTyrGlyLeuValThrTyrAlaThrTyrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTG------CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCGGGCAAGGGGACGCAGGGAGGATGGG---GGTCCAGCC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGC
                                                                AsnMetGlyGlyAspProIleThrValIleAspGluIleArgAspLeuLeuTyrIleGly
                                                                                                                                                                                                                                                       GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGA------
                                                                                                                                                                                                                                                                                            LeuAsnGluIleAsnTyrGluAspHisLysLeuLysSerGlyThrAsnThr-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----GluGlyValAspAlaGluAspGlyHisGlyProGlyGluGlnGlnLysArgLys
                                                                                                                                         ProProGluGlyTrpAsnArgThrArgHisValileIleLeuMetThrAspGlyLeuHis 426
      sapiens
                                                                                                                                                                                                                   ----LysLysAlaLeuGlnAlaValTyrSerMetMetSerTrpProAspAspVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.000598
126.50
37.99%
19.53%
4.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----ValAlaGluAlaPheLeuSerSerLeuThrGluThrIle-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                      ---GAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and Treatment of Preeclampsia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   798
74
70
128
107
                                                                  446
                                                                                                                                                                                                                     406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          310
                                                                                                                                                                                                                                                           511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 217
```

밁 Ş 밁 S 밁 ঠ 밁 Ş 밁 ঠ 밁 ঠ 밁 ঠ 밁 5 밁 ર્ 밁 S 밁 ş 밁

ર્ 밁 δ 밁 ঠ 8 ঠ 밁 S

밁

Qy 59 GGAGCGTGGGAAGGAGCGGACCCTGCTCTCCCCGGGCTGCGGGCCATGGCCACGGCGAG 118     :::        :::   ::: Db 206 GlySerTrpSerGlyThrGluProSerCysGlnAspSerPheMetTyrAspSerProGln 225	US-09-970-076-1 (1-1414) x US-11-057-047-6 (1-761)	4.70% Indels:	Pred. No.: 0.00251 Length: 761 Score: 119.50 Matches: 78 Percent Similarity: 37.37% Conservative: 67 Rest Local Similarity: 20.10% Mismarches: 118	ignment Scores:	GRANISM: Mus musculus US-11-057-047-6	; LENGTH: 761		; PRIOR FILING DATE: 2004-12-14 ; PRIOR APPLICATION NUMBER: US04/015040 ; PRIOR FILING DATE: 2004-05-13	FILING DATE: 2004-02-10 APPLICATION NUMBER: 60/636,	CURRENT REFLICATION NUMBER: 00/11/03/04/ PRIOR APPLICATION NUMBER: 60/543,594	s Related T	Gelfand, Erwin Gilkeson, Gary	; APPLICANT: Thurman, Joshua ; APPLICANT: Thurman, Joshua ; APPLICANT: Taube, Christian	Sequence 6, Application US/11057047  Publication No. US20050260198A1  GENERAL INFORMATION: GENERAL INFORMATION:	RESULT 7 US-11-057-047-6	Db 548AlavalvalSerGluTyrPheValLeuThrAlaAlaHisCys 561	98 ATGAACGATGGCCTCTCT		OV 938 TTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGC 997	878 TTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTAT	Db 513GlyMetValTrpGluHisArgLysGlyThrAsp 523	QY 818 GTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGC 877	Db 506 Ser	QY 758 TCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAA 817	Db 487 PheLysValLysAspMetGluAsnLeuGluAspValPheTyrGlnMetIleAspGlu 505	QY 698 TTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAG 757	467 Leu	Db 447 LysAspArgLysAsnProArgGluAspTyrLeuAspValTyrValPheGlyValGlyPro 466  Oy 641GTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTG 697
Q D Q	, B	8	D Q	뮍	9	DЬ	Ş	B &	В	Ş	Db Q	Db	80	D Qy	DЬ	ρ	Db	8	B &	) B	Q	Db	φ	DЬ	δ	дb	Ś	g d
971 GGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTTTTATCTCCAGTTCT 1030 513	00 ArgProLeuLyBGLyH1BGLUTOr	11 AAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTT	851 CGCAACGTGGACAGGGTCCTCTGCAGCTCCAAGATCAATGACTCGGTCACACTCAATGAG 910 :::           ::::::		CAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCC	460 AsnValPheTyrGlnMetIleAspGluThrLysSerLeu 472	731 GGCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCC 790	671 CGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAA 730	421 AspValTyrVaiPheGlyValGiyProLeuVaiAspSerValAsnIleAsnAlaLeuAia 440	617 GGTGCAATTGTTTACTGTGTTTGGTGTGAAAGATTTCAATGAGACACAGCTGGCC 670	569 GATCTCTTTTCTATTCMAM9AGGGAGGCTAATMGGTCTCGAGATCIT 616 	82 IleIleMetThrAspGlyLeuHisAsnMetGlyGlyAsnProValThrValIleGln	539 ATTGCTTTGACTGATGGAGAACTCCAT	503GAAAACAAGGTACAGGACAGCCAGCGTCATC 538	348 SerGlyThrAsnThr	443 CCAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTAT 502	:::::      328 AspAlaAspTrpValThrGluLysLeuAsnGlnIleSerTyrGluAspHisLysLeuLys 347	01GAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTG	34/ TITATITITITICACCUSAGAACANCETTAATSAANCETSACAGACASCACET 400	293EeuIleGluLysValAlaSerTyrGlyValArgProArgTyrGly 307	287 ATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCC 346 :::   ::::    :::	276 AspSerIleGlySerSerAsnPheThrGlyAlaLysArgCysLeuThrAsn 292	260 GGAAGTGTG	258 IleValLeuAspProSerGlySerMetAsnIleTyrLeuValLeuAspGlySer 275	209GTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCA 259	:::    240GluGlyAlaAspAlaGluAspGlyHisSerProGlyGluGlnGlnLysArgLys 257	179 GCCGGGCAAGGGGACGCAGGGAGGATGGG	119 CGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGC 178 :::         226 GluValAlaGluAlaPheLeuSerSerLeuThrGluThrIle 239

Mon

113 448 96

```
밁
                                             밁
                                                                                      ş
                                                                                                                                                                                                    Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-131-826A-294
ફ
                                                                                                                                                                                                                                                                                                   Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo Sapien
US-10-131-826A-294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR APPLICATION NUMBER: 60/059113
PRIOR APPLICATION NUMBER: 60/059113
PRIOR APPLICATION NUMBER: 60/059113
PRIOR APPLICATION NUMBER: 60/059115
                                                                                                                                     US-09-970-076-1 (1-1414) x US-10-131-826A-294 (1-915)
                                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1997-09-19
PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
Remaining Prior Application data removed - See File Wrapper or NUMBER OF SEQ ID NOS: 550
SEQ ID NO 294
LENGTH: 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 294, Application US/10131826A
Publication No. US20050245730A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Baker, Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/059263 FILING DATE: 1997-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/059352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/059184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 1997-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     517
    290
                                               57
  TATTACTTT---GTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTG---AGAATG 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG---CTGCACCACTGGAATGAAATC
                                             AspLeuValPheIleIleAspSerSerArgSerValAsnThrHisAspTyrAlaLysVal 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tumas, Daniel
Watanabe, Colin K
Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gao, Wei-Qiang
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Goddard, Audrey
Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Desnoyers, Luc
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DeForge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Beresini, Maureen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1997-09-17
                                                                                                                                                                                                      0.00911
113.50
43.90%
22.36%
4.47%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/059122
                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     524
                                                                                                                                                                                   915
53
103
35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 9
US-11-113-424-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                           PRIOR APPLICATION NUMBER: 60/256,704
PRIOR FILING DATE: 2000-12-19
PRIOR PELING DATE: 2001-08-10
PRIOR FILING DATE: 2001-08-10
PRIOR PELING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: 60/257,314
PRIOR APPLICATION NUMBER: 60/257,314
PRIOR APPLICATION NUMBER: 60/311,613
PRIOR FILING DATE: 2001-08-10
PRIOR PELING DATE: 2001-08-29
PRIOR PELING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/307,506
PRIOR APPLICATION NUMBER: 60/307,506
PRIOR APPLICATION NUMBER: 60/307,506
PRIOR APPLICATION NUMBER: 60/307,506
PRIOR APPLICATION NUMBER: 60/307,506
PRIOR APPLICATION NUMBER: 60/307,506
PRIOR APPLICATION NUMBER: 60/307,506
PRIOR APPLICATION NUMBER: 60/307,506
PRIOR APPLICATION NUMBER: 60/307,506
PRIOR APPLICATION NUMBER: 60/307,506
PRIOR APPLICATION NUMBER: 60/307,506
PRIOR APPLICATION NUMBER: 60/307,506
PRIOR APPLICATION NUMBER: 60/307,506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 39, Applica publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Gangolli et al.
TITLE OF INVENTION: Polypeptides and Nucleic
FILE REFERENCE: 21402-225
CURRENT APPLICATION NUMBER: US/11/113,424
CURRENT FILING DATE: 2005-04-21
    OR FILING DATE: 2001-08-29
OR APPLICATION NUMBER: 60/307,506
OR FILING DATE: 2001-07-24
OR APPLICATION NUMBER: 60/322,358
OR FILING DATE: 2001-09-14
OR APPLICATION NUMBER: 60/294,075
OR FILING DATE: 2001-05-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  114 PheLysArgLysSerGluValGluArgAlaValLysArgMetArgHisLeuSerThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               893 TCGGTCACACTCAATGAG 910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  246 GluHisAsnCysAla-----HisPheCysIleAsnIleProGlySerTyrValCysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        207 IleGlySerGluProHisGluAspHisValPheLeuValAlaAsn---PheSerGlnIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   668 GCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              187 ThrGlyIleLeuIlePheAlaIleGlyValGlyGlnValAspPheAsnThrLeuLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           614 CTTGGTGCAATTGTTTACTGTGTTGGTGTG-----AAAGATTTCAATGAGACACAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 151 AlaGluGiyAlaArgProLeuArgGluAsnValProArgValIleMetIleValThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               509 AGACAAGGGTACAGG------ACAGCCAGCGTCATCATTGCTTTGACTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            134 ThrMetThrGlyLeuAlaIleGlnTyr------AlaLeuAsnIleAlaPheSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  389 ACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          344 TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTA------ATGAAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 282 LeuCysAlaMetGluAsp 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          264 CysLysGlnGlyTyrIleLeuAsnSerAspGlnThrThrCys-----ArgIleGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             788 TCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           226 GluThrLeuThrSerValPheGlnLysLysLeuCysThrAlaHisMetCysSerThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          728 CAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97 GlyLeuLeuGlnTyr------GlySerThrValLysAsnGluPheSerLeuLysThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     77 LysGluPheIleValAspIleLeuGlnPheLeuAspIleGlyProAspValThrArgVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlyArgProGlnAspSerVal------AlaGluValAlaAlaLysAlaArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/11113424
vo. US20050260713A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---- AACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                Acids Encoding
```

263 892 225

727

787

206

133 508 150 553 570

186

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
RESULT
                                밁
                                                            δ
                                                                                                  밁
                                                                                                                              S
                                                                                                                                                                  В
                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-1 (1-1414) x US-11-113-424-39 (1-956)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-11-113-424-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/288,153
PRIOR FILING DATE: 2001-05-02
NUMBER OF SEQ ID NOS: 190
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 39
LENGTH: 956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
 10
                                                                                                                                                                                                                                                                                                                                                                                                                614
                                                                                                                                                                                                                                                                                                                                                                                                                                                171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  151 AlaGluGlyAlaArgProLeuArgGluAsnValProArgVallleMetIleValThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          389
                                                                                                                                    848
                                                                                                                                                                                                                                          226
                                                                                                                                                                                                                                                                            728
                                                                                                                                                                                                                                                                                                          207
                                                                                                                                                                                                                                                                                                                                                                              187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysGluPheIleValAspIleLeuGlnPheLeuAspIleGlyProAspValThrArgVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTA------ATGAAACTG
                                                                                                                                                                                                                                                                                                      TATTACTTT----GTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTG----AGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspLeuValPheIleIleAspSerSerArgSerValAsnThrHisAspTyrAlaLysVal
                                                                                                                                                                                                                                                                          CAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCA
                                                                                                                                                                                                                                                                                                                                                                            ThrGlyIleLeuIlePheAlaIleGlyValGlyGlnValAspPheAsnThrLeuLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                CTTGGTGCAATTGTTTACTGTGTTGGTGTG-----AAAGATTTCAATGAGACACAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                GlyArgProGlnAspSerVal-----AlaGluValAlaAlaLysAlaArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGACAAGGGTACAGG------ACAGCCAGCGTCATCATTGCTTTGACTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrMetThrGlyLeuAlaIleGlnTyr-----AlaLeuAsnileAlaPheSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PheLysArgLysSerGluValGluArgAlaValLysArgMetArgHisLeuSerThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAGAAGACAGAGAACAAATCCGTCAAGGCCCTAGAAGAACTCCAGAAAGTTCTGCCAGGA 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlyLeuLeuGlnTyr------GlySerThrValLysAsnGluPheSerLeuLysThr 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG---CTGCACCACTGGAATGAAATC
                                LeuCysAlaMetGluAsp 287
                                                                  TCGGTCACACTCAATGAG 910
                                                                                                  CysLysGlnGlyTyrIleLeuAsnSerAspGlnThrThrCys-----ArgIleGlnAsp
                                                                                                                                    GCCCGC------AACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGAC
                                                                                                                                                                      GluHisAsnCysAla-----HisPheCysIleAsnIleProGlySerTyrValCysArg
                                                                                                                                                                                                      TCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACAT
                                                                                                                                                                                                                                        GluThrLeuThrSerValPheGlnLysLysLeuCysThrAlaHisMetCysSerThrLeu
                                                                                                                                                                                                                                                                                                                               GCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCAGGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.00922
113.50
43.90%
22.36%
4.47%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      956
53
103
35
                                                                                                                                                                                                                                          245
                                                                                                                                                                                                                                                                                                              225
                                                                                                                                                                                                                                                                                                                                                                                206
                                                                                                                                                                                                                                                                                                                                                                                                                                                  186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  76
                                                                                                     281
                                                                                                                                                                                                                                                                                                                                                727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 24, Application US/10601368

Publication No. US20050260702A1

GENERAL INFORMATION:
APPLICANT: PDAD, Yang
APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USE
FILE REFERENCE: 07334-275001

CURRENT APPLICATION NUMBER: US/10/601,368

CURRENT APPLICATION NUMBER: US/0561,263A

PRIOR APPLICATION NUMBER: US/09/561,263A

PRIOR FILING DATE: 2000-04-27

PRIOR APPLICATION NUMBER: US 09/322,790

PRIOR APPLICATION NUMBER: US 09/322,790
                                                                                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-601-368-24
                                                          δ
                                                                                                    밁
                                                                                                                                  S
                                                                                                                                                                      밁
                                                                                                                                                                                                  S
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-1 (1-1414) x US-10-601-368-24 (1-1141)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-601-368-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 24
LENGTH: 1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 40 SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          178
                                                                                                                                                                                                                                                                                                              257
                                                                                                                                                                                                                                                                                                                                                                                 237
                                                                                                                                                                                                                                                                                                                                                                                                                  452
                                                                                                                                                                                                                                                                                                                                                                                                                                                    217
                                                                                                                                                                                                                                                                            AsnAspTyrArgSerValLysAspValValGluAlaAlaSerHisIleGluGlnArgGly
                                 GluAlaAlaLeu---
                                                                                                                                                                                                                                                                                                            GlyGlyArgLy8GlyAlaLy8-----Ly8ValMetIleValIleThrAspGlyGluSer
                                                                                                                                                                                                                                                                                                                                                                                                                  GACACTTACATGCATGAAGGATTTGAA-----AGGGCCAGTGAGCAGATTTATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TrpValGluValGlnHisPheLeuIleAsnIleLeuLysLysPheTyrIleGlyProGly 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ||| |---TyrPro
                                                                  CTGGCCCGGATTGCGGACAGTAAGGATCATGTCTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                          HisAspSerProAspLeuGluLysValIleArgGlnSerGluLysAspAsnValThrArg
                                                                                                                                                                                                                                                                                                                               GAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAAACTC
                                                                                                                                                                                                                                                                                                                                                                                GlyThrGluThrArgThrAlaPheGlyIleGluPheAlaArgSerGluAlaPheGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GinIleGlnValGlyIleValGlnTyrGlyGluAspAlaValHisGluPheHisLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCAC
 CTGCAAGGC 733
                                                                                                     AsnGluIleLysTyrIleAlaSerAspProAspAspLysHisPhePheAsnValThrAsp
                                                                                                                                      GGTGCAATTGTTTACTGTGTTGGTGTGAAAGAT-----TTCAATGAGACACAG
                                                                                                                                                                      TyrAlaValAlaValLeuGlyTyrTyrAsnArgArgGlyIleAsnProGluThrPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGTTGAGAATGTCCTTTATTGTTTTCTCCACCGAGGAACAACCTTAATGAAACTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.0162
111.00
37.93%
24.14%
4.37%
                                                                                                                                                                                                        -CTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTT
                                   LysAspIleValAspAlaLeuGlyAspArgIlePheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1141
49
28
88
38
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    THEREOF
```

277

616

314

294 571 274 562 256 502 236 451 216 391

334 664

724

```
APPLICANT: LOTA, JOSE M.

TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF

FILE REFERENCE; 07334-275001

CURRENT APPLICATION NUMBER: US/01/601,368

CURRENT EILING DATE: 2003-06-23

PRIOR APPLICATION NUMBER: US/09/561,263A

PRIOR APPLICATION NUMBER: US/09/561,263A

PRIOR FILING DATE: 2000-04-27

PRIOR FILING DATE: 1000-04-27

PRIOR FILING DATE: 1099-05-28

NUMBER OF SEQ ID NOS: 40

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 22

LENGTH: 1166

TYPE: PRT

ORGANISM: Mus musculus
                                                                                                                                                               밁
                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
Ş
                                밁
                                                              ફ
                                                                                                밁
                                                                                                                        र्
                                                                                                                                                                                            δ
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-1 (1-1414) x US-10-601-368-22 (1-1166)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 22, Application No. US20050; GENERAL INFORMATION: APPLICANT: Pan, Yang APPLICANT: Lora, Jose
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Match:
                                                                                                                                                                                                                                                                                                                                                               195
                                                                                                                                                                                                                                                                                                                                                                                                                              176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           352
                                                                                                                                                                                                                                                                                                                               452
                                                                                                                                                                                                                                                                                                                                                                                                                                                             332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             156
                                                                                                                                 572
                                                                                                                                                                 253
                                                                                                                                                                                                                                235
   665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |||:::|||
|LeuGluGly
                                                                                                                                                                                                                                                                                                                                                              AsnAspTyrArgSerValLysAspValValGluAlaAlaSerHisIleGluGlnArgGly 214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TrpValGluValGlnHisPheLeuIleAsnIleLeuLysLysPheTyrIleGlyProGly 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ||| ::: ::||||| || || || ::: :::
CysGlnThrTyrMetAspIleValIleValLeuAspGlySerAsnSerIle---TyrPro 155
                                                                                                                                                                                                CATGAAGAT
                                                                                                                                                                                                                            GlyGlyArgLysGlyAlaLys-----LysValMetIleValIleThrAspGlyGluSer 252
                                                                                                                                                                                                                                                             GAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTC 562
                                                                                                                                                                                                                                                                                                                             GACACTTACATGCATGAAGGATTTGAA-----AGGGCCAGTGAGCAGATTTATTAT 502
                                                                                                                                                                                                                                                                                                                                                                                              GAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGA 451
                                                                                                                                                                                                                                                                                                                                                                                                                              GinIleGinValGlyIleValGinTyrGlyGluAspAlaValHisGluPheHisLeu--- 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACA 391
CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCT 724
                                 AsnGluIleLysTyrIleAlaSerAspProAspAspLysHisPhePheAsnValThrAsp 312
                                                                                                TyrAlaValAlaValLeuGlyTyrTyrAsnArgArgGlyIleAsnProGluThrPheLeu 292
                                                                                                                                                               HisAspSerProAspLeuGluLysValIleArgGlnSerGluLysAspAsnValThrArg
                                                                                                                                                                                                                                                                                             GlyThrGluThrArgThrAlaPheGlyIleGluPheAlaArgSerGluAlaPheGlnLys 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCAC
                                                              GGTGCAATTGTTTACTGTGTTGGTGTGAAAGAT-----TTCAATGAGACACAG 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/10601368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.0163
111.00
37.93%
24.14%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.37%
                                                                                                                               CTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTT 616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28
88
38
                                                                                                                                                                 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-601-368-21
                  S
                                                  맑
                                                                                 S
                                                                                                                   밁
                                                                                                                                             S
                                                                                                                                                                                밁
                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21, Applica Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 1188
TYPE: PRT
ORGANISM: Mus musculus
FEATURE:
NAME/KEY: SIGNAL
LOCATION: (1)...(22)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Pan, Yang APPLICANT: Lora, Joi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Хо
::
                      572
                                                    275
                                                                                                                                                                                                                                                                                                                                                                                                                  278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           330 LeuGluGly 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313 GluAlaAlaLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGCAAGGC 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (1) ... (22)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lora, Jose M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.0164
111.00
37.93%
24.14%
4.37%
```

```
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT ANI
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-1 (1-1414) x US-10-601-368-21 (1-1188)
                                                                                                                                                                                                                                                                                                                                                                                                                                      392 GAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGA 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             178 TrpValGluValGlnHisPheLeuIleAsnIleLeuLysLysPheTyrIleGlyProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             452 GACACTTACATGCATGAAGGATTTGAA-----AGGGCCAGTGAGCAGATTTATTAT 502
                                                                             HisAspSerProAspLeuGluLysValIleArgGlnSerGluLysAspAsnValThrArg 294
                                                                                                                                                                            GlyGlyArgLysGlyAlaLys-----LysValMetileValIleThrAspGlyGluSer 274
                                                                                                                                                                                                                                 GAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTC
                                                                                                                                                                                                                                                                                    GlyThrGluThrArgThrAlaPheGlyIleGluPheAlaArgSerGluAlaPheGlnLys 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnIleGlnValGlyIleValGlnTyrGlyGluAspAlaValHisGluPheHisLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACA 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCAC
                                                                                                                                                                                                                                                                                                                                                                                      AsnAspTyrArgSerValLysAspValValGluAlaAlaSerHisIleGluGlnArgGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/10601368
CTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -LysAspIleValAspAlaLeuGlyAspArgIlePheSer 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1188
49
28
88
38
                                                                                                                                                                                                                                    562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       277
                                  616
                                                                                                                                                                                                                                                                                                                                                                                           236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  197
                                                                                                                                    571
```

δ 밁 Ş 밁 á

밁

```
RESULT 13
US-10-601-368-6
; Sequence 6, Application US/10601368
; Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-1 (1-1414) x US-10-601-368-6 (1-1141)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Lora, Jose M. TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF FILE REFERENCE: 07334-275001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Pan, Yang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 1141
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: SIGNAL
                                         503
                                                                                                                                                              217
                                                                                                                                                                                                                                               198
                                                                                                                                                                                                                                                                                                                          178 TrpValGluValGlnHisPheLeuIleAsnIleLeuLysLysPheTyrIleGlyProGly
                                                                                                                                                                                                                                                                                                                                                                                                      725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         295
    257
                                                                                                                        452
                                                                                                                                                                                                     392
                                                                                                                                                                                                                                                                                                                                                                 278 TGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                218 TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCAC
                                                                               237 GlyThrGluThrArgThrAlaPheGlyIleGluPheAlaArgSerGluAlaPheGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                352 LeuGluGly 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGCAAGGC 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluAlaAlaLeu-----LysAspIleValAspAlaLeuGlyAspArgIlePheSer 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnGluIleLysTyrIleAlaSerAspProAspAspLysHisPhePheAsnValThrAsp 334
GlyGlyArgLy8GlyAlaLy8-----Ly8ValMetIleValIleThrAspGlyGluSer
                                     GAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTC
                                                                                                                                                                                                                                        GlnIleGlnValGlyValValGlnTyrGlyGluAspValValHisGluPheHisLeu---
                                                                                                                                                                                                                                                                                  CAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTGCAATTGTTTACTGTGTTGGTGTGAAAGAT------
                                                                                                                        GACACTTACATGCATGAAGGATTTGAA-----AGGGCCAGTGAGCAGATTTATTAT
                                                                                                                                                              AsnAspTyrArgSerValLysAspValValGluAlaAlaSerHisIleGluGlnArgGly
                                                                                                                                                                                                     GAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TyrAlaValAlaValLeuGlyTyrTyrAsnArgArgGlyIleAsnProGluThrPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.037
107.00
37.93%
24.14%
4.21%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1141
49
28
88
38
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCAATGAGACACAG
                                         562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  664
    274
                                                                                 256
                                                                                                                                                                236
                                                                                                                                                                                                     451
                                                                                                                                                                                                                                             216
                                                                                                                                                                                                                                                                                    391
                                                                                                                                                                                                                                                                                                                                                                                                                                                277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                            밁
                                                                                                                    Ş
                                                                                                                                                                밁
                                                                                                                                                                                                                                             뮍
                                                                                                                                                                                                                                                                                  Ś
    밁
                                   S
                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-601-368-4
                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-1 (1-1414) x US-10-601-368-4 (1-1166)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-601-368-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ for Windows SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-66-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scores
                                                                                                                                                                                                                                          156 TrpValGluValGlnHisPheLeuIleAsnIleLeuLysLysPheTyrIleGlyProGly 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           352 LeuGluGly 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      563
                                           452
                                                                                                                                                                176 GlnIleGlnValGlyValValGlnTyrGlyGluAspValValHisGluPheHisLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        335 GluAlaAlaLeu-----LysAspIleValAspAlaLeuGlyAspArgIlePheSer 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     315 AsnGluIleLysTyrIleAlaSerAspProAspAspLysHisPhePheAsnValThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               275 HisAspSerProAspLeuGluLysValIleGlnGlnSerGluArgAspAsnValThrArg 294
                                                                                 195 AsnAspTyrArgSerValLysAspValValGluAlaAlaSerHisIleGluGlnArgGly
                                                                                                                                                                                                                                                                                                                          |||::: ::||||| ||| |||::: :::
| CysGlnThrTyrMetAspIleValIleValLeuAspGlySerAsnSerIle---TyrPro 155
    GlyThrGluThrArgThrAlaPheGlyIleGluPheAlaArgSerGluAlaPheGlnLys
                                         GACACTTACATGCATGAAGGATTTGAA------AGGGCCAGTGAGCAGATTTATTAT 502
                                                                                                                        GAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGA
                                                                                                                                                                                                   CAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACA 391
                                                                                                                                                                                                                                                                                    TGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGCAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TyrAlaValAlaValLeuGlyTyrTyrAsnArgArgGlyIleAsnProGluThrPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGAAGAT--
                                                                                                                                                                                                                                                                                                                                                                 TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGCAATTGTTTACTGTGTGGTGGAAAGAT-----TTCAATGAGACACAG 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.0373
107.00
37.93%
24.14%
4.21%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                1166
49
28
88
38
                                                                                                                          451
                                                                                                                                                                                                                                                                                                                                                                   277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            616
    234
                                                                                                                                                                  194
                                                                                                                                                                                                                                                                                      331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         571
                                                                                   214
```

Ś

Ś

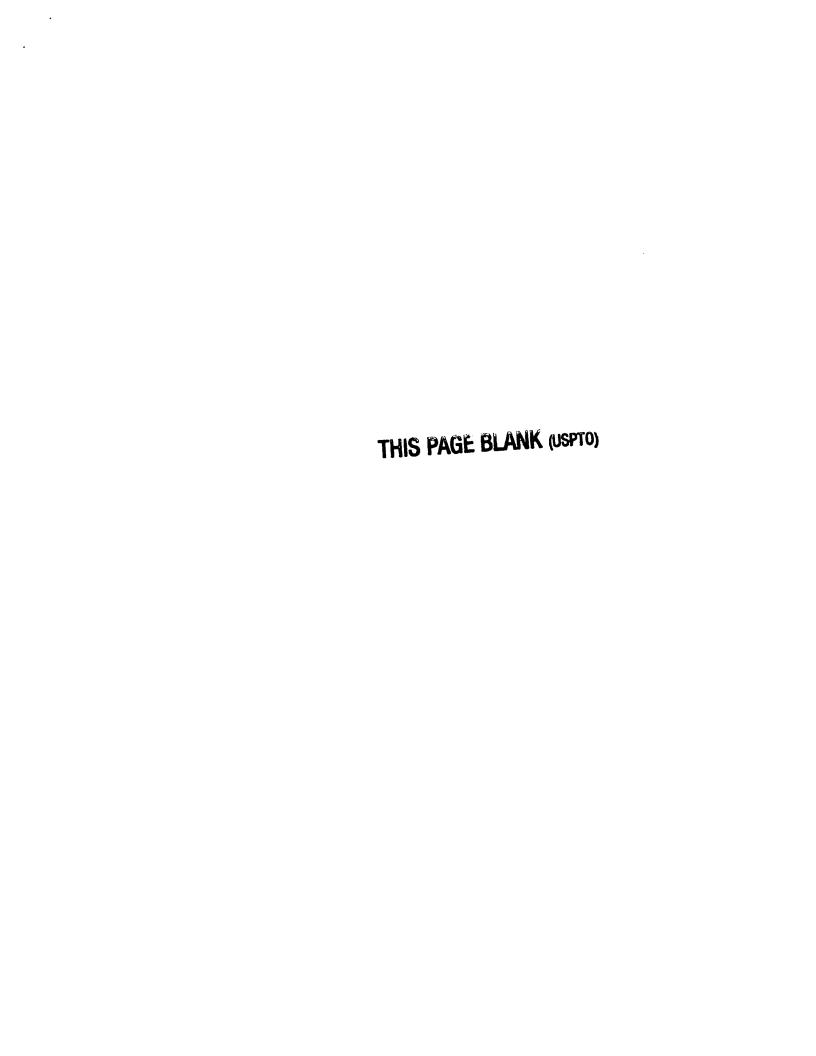
밁 Ş 밁 S 밁 ঠ 밁

유 δ

```
APPLICANT: Pan, Yang
APPLICANT: LOTA, JOSE M.
ITITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 3
SEQ ID NO 3
                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                밁
                                                                                             र्
                                                                                                                                  밁
                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
US-10-601-368-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
밁
                              δ
                                                                                                                                                                                                        US-09-970-076-1 (1-1414) x US-10-601-368-3 (1-1188)
                                                                                                                                                                                                                                                                                                                           Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                 US-10-601-368-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
NAME/KEY: SIGNAL
LOCATION: (1)...(22)
                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 1188
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               235 GlyGlyArgLysGlyAlaLys-----LysValMetIleValIleThrAspGlyGluSer 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       503 GAAAACAGACAAGGGTACAGGCCAGCCAGCGTCATCATTGCTTTTGACTGATGGAGAGAACTC
                                                                    178
                                                                                                                                      159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      313 GluAlaAlaLeu-----LysAspIleValAspAlaLeuGlyAspArgIlePheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   563 CATGAAGAT------
198
                                  332
                                                                                                    278
                                CAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACA 391
                                                                                         TGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---
                                                                                                                                    LeuGluGly 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGCAAGGC 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AsnGluIleLysTyrIleAlaSerAspProAspAspLysHisPhePheAsnValThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTGCAATTGTTTACTGTGTTGGTGTGAAAGAT-----TTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TyrAlaValAlaValLeuGlyTyrTyrAsnArgArgGlyIleAsnProGluThrPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----CTCTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HisAspSerProAspLeuGluLysValIleGlnGlnSerGluArgAspAsnValThrArg
GlnIleGlnValGlyValValGlnTyrGlyGluAspValValHisGluPheHisLeu---
                                                                  TrpValGluValGlnHisPheLeuIleAsnIleLeuLysLysPheTyrIleGlyProGly 197
                                                                                                                                                                    TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCAC 277
                                                                                                                                                                                                                                                       0.0374
107.00
37.93%
24.14%
4.21%
                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                        1188
49
28
88
38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           664
                                                                                                      331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 616
```

```
В
                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                    5
                                                         밁
                                                                                 Ş
                                                                                                                   몽
                                                                                                                                           S
                                                                                                                                                                                                                                      문
352
                          725 CTGCAAGGC 733
                                                          335 GluAlaAlaLeu----
                                                                                      665 CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                   315 AsnGluIleLysTyrIleAlaSerAspProAspAspLysHisPhePheAsnValThrAsp
                                                                                                                                                                             275 HisaspSerProAspLeuGluLysValIleGlnGlnSerGluArgAspAsnValThrArg
                                                                                                                                                                                                                                                                     563 CATGAAGAT-----
                                                                                                                                                                                                                                                                                               503 GAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTC
                                                                                                                                                                                                                                                                                                                                                           237 GlyThrGluThrArgThrAlaPheGlyIleGluPheAlaArgSerGluAlaPheGlnLys
                                                                                                                                                                                                                                                                                                                                                                                       452 GACACTTACATGCATGAAGGATTTGAA-----AGGGCCAGTGAGCAGATTTATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                    217 AsnAspTyrArgSerValLysAspValValGluAlaAlaSerHisIleGluGlnArgGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                  392 GAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGA
                                                                                                                                                                                                    ------CTCTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTT
LeuGluGly 354
                                                                                                                                                 GGTGCAATTGTTTACTGTGTTGGTGTGAAAGAT-----TTCAATGAGACACAG
                                                          ---LysAspIleValAspAlaLeuGlyAspArgIlePheSer
                                                                                                                                                                                                                                                                        1 1 1 1 1
                                                             351
                                                                                                                                                  664
                                                                                                                                                                                                             616
                                                                                                                                                                                                                                         294
                                                                                                                                                                                                                                                                      571
                                                                                                                                                                                                                                                                                                   274
                                                                                                                                                                                                                                                                                                                                                             256
                                                                                                                                                                                                                                                                                                                                                                                                                                                     451
                                                                                         724
                                                                                                                      334
                                                                                                                                                                                314
```

Search completed: December 14, 2005, 12:55:25
Job time : 26.3002 secs



```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                        Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM nucleic - nucleic search,
                                                                                                                                                                                   Database
                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                     Searched:
                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      92:
                                                                                                                                                                                                                                                       seq length: 0
seq length: 2000000000
                                     6:
7:
8:
9:
10:
11:
                                                                                                                                                                                                                                                                                                                                         IDENTITY_NUC Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-1_COPY_104_1207
                                                                                                                                                                                                                                                                                                                                                                                                                              December 18, 2005, 07:01:38 ; Search time 5918.11 Seconds (without alignments)
10603.927 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                  5883141 seqs, 28421725653 residues
                                                                                                                                                                                                                                                                                                                                                                              GenEmbl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
gb_in:*
                                                                                                            gb_pat:*
                                                                                                                                 gb_om:*
                                                                                                                                                gb_env:*
                                                                                                                        04:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             using sw model
                                                                                                                                                                                                                                                                                                                                           Gapext 1.0
                                                                                                                                                                                                           summaries
                                                                                                                                                                                                                                                                                              11766282
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

13 15 16 17 18	10 11 12	7 O U & U O P	Result No.
949. 853.4 853.4 853.4 803.4	1090.4 1089.4 1089.4 949.4	1104 1104 1090.8 1090.8 1090.8 1090.8	Score
86.0 77.3 77.3 77.3 77.3 77.3	98.8 98.7 98.7 86.0	100.0 98.8 98.8 98.8	: 당각
2052 5220 5220 1609	1658 1496 1578 2112 2112	1414 1414 5540 5540 5540	Length
თდდთით	00000	, , , , , , , , , , , , , , , , , , ,	B B
AK233273 AX393256 AX399370 AF378762 BC094544 AR338517	AY928977 AY928974 AY928976 AY458372 BC012074	XX458366 AX421380 AX393246 AX393301 AX458370 AX458379145 AY928975	ID
AK223273 Homo sapı AX393256 Sequence AX393370 Sequence AF378762 Mus muscu AF37874 Mus muscu AR338517 Sequence	Homo Homo Segu	AX45836 Sequence AF421380 Homo sapi AX393246 Sequence AX393301 Sequence AX458370 Sequence AF279145 Homo sapi AY928975 Homo sapi	1 P

á

1 ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT 60

Query Match Best Local Similarity Matches 1104; Conserv

Conservative

100.0%; Sc 100.0%; P; ative 0;

Length 1414; Indels

0

Gaps

45	44	43	42	41	40	39	38	37	36	35	34	33	32	<u>ω</u>	30	29	28	27	26	25	24	23	22	21	20	۲
340.2	341.8	342.8	343	343	343	344.6	344.6	344.6	•	344.6	344.6	344.6	346	346.2	346.2	348	349	516.8	542.8	573.4	667.8	787	787	787	787	000
30.8	31.0	31.1	31.1	31.1	31.1	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.3	31.4	31.4	31.5	31.6	46.8	49.2	51.9	60.5	71.3	71.3	71.3	71.3	
1458	3501	1461	3677	3677	3677	4350	4348	3677	3676	1470	14.67	1464	346	2234	2234	355	356	3981	4007	736	4739	1436	1436	1436	1436	1
0	σ	თ	σ	σ	σ	0	ð	0	8	œ	0	σ	σ	œ	σ	0	ð	σ	œ	9	9	œ	σ	σ	σ	•
BD272533	BD272513	BD272532	BD272510	BD272509	BD272508	BD272540	CQ414929	BD272492	AB209913	AY233452	BD272541	BD272493	CQ433315	AK091721	AX747144	CQ415556	CQ426476	AR578074	AK025429	AY754025	BC057043	AK001463	AX876800	AX458374	BD156323	
BD272533							CQ414929												_	-		-	_	AX458374		
Secreted	Secreted	Secreted	Secreted	Secreted	Secreted	Secreted	Sequence	Secreted	Ното варт	Ното варт	Secreted	Secreted	Sequence	Homo sapi	Sequence	Sequence	Sequence	Sequence	Homo sapi	Rattus no	Mus muscu	Ното варі	Sequence	Sequence	Primer to	•

## ALIGNMENTS

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1
AX458366
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                  Sg
                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1414 bp
Sequence 1 from Patent W00246228
AX458366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Young, J.A., Bradley, K.A., Collier, R.J. an Receptor for b. Anthracis toxin Patent: WO 024628-A 1 13-JUN-2002; WISCONSIN ALUMNI RESEARCH FOUNDATION (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX458366.1 GI:21725038
                                                                                                          /protein_il="CAD38349.1"
//protein_il="CAD38349.1"
//db_xref="GI:21725039"
//translation="MATAERRALGIGFQWLSLATLVLICAGQOGRREDGGPACYGGFD
/translation="MATAERRALGIGFQWLSLATLVLICAGQOGRREDGGPACYGGFD
LYFILDXGSGYULHHWBILYYEVEQLAHKF18PQLRWSFIVFSTGTTLMKLTEDREQI
RQGLEELQKVLPGGDTYMHEGFFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKOHVFPVNBGFQALQGIIHSILKK
SCIELLAAEPSTICAGESFQVVVRGNGFRHARWUDBYLCSFKINDSVTLNEKFFSVEN
SCIELLAAEPSTICAGESFQVVVRGNGFRHARWUDBYLCSFKINDSVTLNEKFFSVEN
TYLLCPAPILKEVGMKAALQVSMNDDLSFISSSVIITTTHCSDGSILAIALLILFILL
ALALLMWFWPLCCTVIIKEVPPPPAEESEENKIK"
                                                                                                                                                                                                                                                                                                                                                                /mol_type="unassigned
/db_xref="taxon:9606"
104_ .1210
                                                                                                                                                                                                                                                                                                                                        note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                                                                                                    organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                     codon_start=1
Score 1104; DB 6;
Pred. No. 1e-311;
                                                                                                                                                                                                                                                                                                                                                                                                                  DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and Mogridge, J.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 08-JUL-2002
```

8 8 8 8

₽

_	1081 GAGAGTGAGGAAAATAAAATAAAA 1104 
	1021 TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1080
0 11	961 TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG 1020
0 11	901 GATGGCCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT 960
0 5	841 TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC 900 
	781 ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG 840
	721 GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG 780
	661 ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGACATTTCAAGTTGTC 720
	601 GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC 660
	541 AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC 600
	481 TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
	421 ACAGCCAGCGTCATCATTGCTTTGACTGATGAGAACTCCATGAAGATCTCTTTTTCTAT 480
n .	361 CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG 420 
<b>—</b>	301 CANATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG 360
	241 TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAA 300
	181 GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG 240 
	121 GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT 180
	61 CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC 120
	104 ATGGCCACGGAGGGAAAAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT 163

중 유

밁

8 8 8 8

á

8 8 8 8 8 8 8

밁

& 유

8 8 8 8 8 8 8 8 8

Ś

Ş

```
TITLE
JOURNAL
PUBMED
REMARK
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 2
AF421380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                        S
                                                                                                          밁
                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3'UTR
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 1104; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1184 GAGAGTGAGGAAAATAAAATAAAA 1207
344
                                                   241
                                                                                                          284
                                                                                                                                                                181
                                                                                                                                                                                                                      224
                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                   164
                                                                                                                                                                                                                                                                                                                                                                                                                                             104
                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens anthrax toxin recep
AF421380
AF421380.1 GI:16566412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        http://www.nature.com
2 (bases 1 to 1414)
Bradley,K.A., Mogridge,J., Mourez,M., Collier,R.J. and Young,J.A
Direct Submission
Submitted (19-SBP-2001) Department of Oncology, University of
Wisconsin-Madison, 1400 University Ave., Madison, WI 53706, USA
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 1414)
Bradley, K.A., Mogridge, J., Mourez, M., Collier, R.J. and Young, J.A.
Identification of the cellular receptor for anthrax toxin
Nature 414 (6860), 225-229 (2001)
11700562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                     TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAA
                                                                                                          GAPATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                            GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
  TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                      CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                          CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; ilarity 100.0%; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /codon_start=1
/product="anthrax toxin receptor"
/product="anthrax toxin receptor"
/protein_id="AAL26496.1"
/protein_id="AAL26496.1"
/protein_id="AAL26496.1"
/db_xref="GI:16566413"
/db_xref="GI:16566413"
/db_xref="MATABERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD/translation="MATABERRALGIGFQWLSLATLVLICAGQGGRREDGGPD/translation="MATABERRALGIGFQWLSHAFISPQLRMSFIVESTGTLMKLTEDLEFQI
/translation="MATABERRALGIGFQWLSHAFISPQLRMSFIVESTGTLMKLTEDLEFQI
/translation="MATABERRALGIGFQWLSHAFISPQLRMSFIXATLTGELHEBLIFFY
/translation="MATABERRALGIGFQWLSHAFISPQLRMSFIXATLTGELHEBLIFFY"
/translation="MATABERRALGIGFQWLSHAFISPQLRMSFIXATLTGELHEBLIFFY"
/translation="MATABERRALGIGFQWLSHAFISPQLRMSFIXATLTGELHEBLIFFY"
/translation="MATABERRALGIGFQWLSHAFISPQLRMSFIXATLTGELHEBLIFT"
/translation="MATABERRALGIGFQWLSHAFIXATLTGELHEBLIFT"
/translation="MATABERRALGIGFQWLSHAFIX"
/translation="MATABERRALGigf
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/cell_line="HeLa"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  note="ATR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .04. .1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1104; DB 8
Pred. No. 1e-311;
Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA
or mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Collier, R.J. and Young, J.A.T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1414;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRI
cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
     403
                                                         300
                                                                                                            343
                                                                                                                                                                   240
                                                                                                                                                                                                                         283
                                                                                                                                                                                                                                                                                                                                      223
                                                                                                                                                                                                                                                                                                                                                                                                                                                163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

RESULT 3 AX393246 LOCUS- DEFINITION ACCESSION VERSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE JOURNAL	9	B & B &	B & B &	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	OY DB	D 04 D 04	Q Q Q
AX393246  Sequence 176 from Patent WO0210217.  AX393246  AX393246.1 GI:19701296  Homo sapiens (human)  M Homo sapiens  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  Mammalla; Eutheria; Euarchontoglires; Primates; Catarrhini;  Hominidae; Homo.  1  S Croix,B., Kinzler,K.W. and Vogelstein,B.  Endothelial cell expression patterns Endothelial cell expression patterns Endothelial cell expression patterns Endothelial cell expression patterns	1021 TGGTTCTGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1080	901 GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACACACA	ATCAATGACTCGGTCACACTCAATGACAAGCCCTTTTCTGTGGAAGACACTTATTTACTG		541 AAAGATTTCAATGAGCACCAGCTGCCCCGGATTGCCGGCACAGTATCATGTGTTTCCC 600  [	ด—ถ н—н	ഒ—ഒ ഒ—ഒ
8 8 8 8 8 8 8 8 8	D	p & p &	P & B &	B & B &	D Q D Q	Query Ma Best Lock Matches Qy Db	FEATURES BOUIC ORIGIN
661 ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGACTCATTTCAAGTTGTC	541 AAAGATTICAATGABACACAGCTGGCCCGGATTGCGGACAGTAAGGATTCATGTTTCCCTGCCGACAGTAAGGATTCATGTTTCCCTGCCGACTGATGCGGACAGTAAGGATTCATGTTTCCCTGCCAGATTGCGACAGTAAGGATTATGTTTTCCCTGCCAAGGATTATGAATGA	421 ACAGCCAGCGICALIGATIGATICATION CONTROL OF A CAGCCAGCGICATCALIGATICATION CONTROL OF A CAGCCAGCGICATCATTGCTTTGACTGATGAGACTCCATGAAGATCTCTTTTTCTAT 481 TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTG 481 TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG 481 TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGTGTGTG	61 61	81 24 84 84	61 04 21 64		The Johns Hopkins University (US) Location/Qualifiers 15540 /organism="Homo sapiens" /mol_type="unassigned DNA" /db_xref="taxon:9606"

Mon

Dec

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 4
AX393301
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઇ
                                                                                                           Ś
                                                                                                                                                              S
                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
     S
                                                      δ
                                                                                   밁
                                                                                                                                        밁
                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 98.8%;
Best Local Similarity 99.8%;
Matches 1092; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1224
                               504
                                                       361
                                                                                   444
                                                                                                             301
                                                                                                                                        384
                                                                                                                                                                  241
                                                                                                                                                                                             324
                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                264
                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                   204
                                                                                                                                                                                                                                                                                                                                                        144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
      421
                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX393301
Sequence 231
AX393301
AX393301.1
                                                                                                                                                                                                                                                                                                                                                                                 _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            St Croix,B., Kinzler,K.W. and Vogelstein,B. Endothelial cell expression patterns Patent: WO 0210217-A 231 07-FEB-2002; The Johns Hopkins University (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                       ATGGCCACGGCGGAGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                               GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAGTGAGGAAAA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCTGG
                                             CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                   CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                  CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                       TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAAGACAGAGAA
                                                                                                                                                                                             GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                     CTGGTGCTCATCTGCGCCCGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                     CTGGTGCTCATCTGCGCCCGGCCAAGGGGGACGCAGGGATGGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
      ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                               CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                         TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        231 from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned DN/
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GI:19701322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent
                                                                                                                                                                                                                                                                                                                                                                                                          Score 1090.8; DB 6
Pred. No. 9.3e-308;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO0210217.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                      5540;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT
                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1103
                                                        420
                                                                                   503
                                                                                                                                                                  300
                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                323
                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                   263
                                                                                                                                                                                                                                                                                                                                                        203
                                                                                                                                                                                                                                                                                                                                                                                   60
        480
                                                                                                             360
                                                                                                                                        443
                                                                                                                                                                                             383
                                                                                                                                                                                                                                                                                                                               120
                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                      KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                   RESULT 5
AX458370
LOCUS
                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                 FEATURES
                                 CDS
                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                        1224
                                                                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                                                                                                                                                                          1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                            AX458370
Sequence 5 1
AX458370
AX458370.1
                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata,
Mammalia, Eutheria, Euarchontoglires, Primates, Cata
                                                                                                             Young, J.A., Bradley, K.A., Collier, R.J.
Receptor for b. Anthracis toxin
Patent: WO 0246228-A 5 13-JUN-2002;
WISCONSIN ALUMNI RESEARCH FOUNDATION (1
                                                                                                                                                                                 Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAGTGAGGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCATCCTGGCCATCGCCTGCTGATCCTGTTCCTGCTCCTAGCCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTTGTTTACTGTGTTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                          TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                recarectedecaredecresesarecterrectedecreseseseseseses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
144. .1838
/note="unnamed |
/codon_start=1
                                         /organism="Homo sapiens"
/mol_type="unassigned DN
/db_xref="taxon:9606"
                                                                                      1. .5540
                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                       from
                                                                                                                                                                                                                                                              GI:21725040
                                                                                                                                                                                                                                                                                        Patent
                                                                                                                                                                                                                                                                                                                                                                                                 1094
                                                                                                                                                                                                                                                                                                                                                                        1237
                                                                                                                                                                                                                                                                                        5540 bp
WO0246228.
                   protein
                                                           DNA"
                   product"
                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                Sn)
                                                                                                                                                       and
                                                                                                                                                       Mogridge, J
                                                                                                                                                                                              ata; Euteleostomi;
Catarrhini;
                                                                                                                                                                                                                                                                                                        PAT
                                                                                                                                                                                                                                                                                                        08-JUL-2002
```

1080 1163 1020

1043 960

900 983 840 923 863

720

780

803 660 600 683 540 623

743

```
Query Match
Best Local Similarity 99.8
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     144
                                                                                                                                                                                                                                                                                                      684
                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                     624
                                                                                                                                                                                                                                                                                                                                                                                                                         481
              781
                                                       864
                                                                                               721
                                                                                                                                      804
                                                                                                                                                                              661
                                                                                                                                                                                                                     744
                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCCACGGCGGAGAGCGCACGCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGTGCTCATCTGCGCCGGCCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC 263
                                                                              GTGAGAGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                             ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                       GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                              GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                      AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCC
                                                                                                                                                                                                                                                                                                                                    AAAGATTTCAATGAGACACAGCTGGCCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                     TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                        ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /protein_id="CAD38350.1"
/db_xref="G1:21725041"
/db_xref="G1:21725041"
/tx=nslation="MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
/tx=nslation="MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
/tx=nslation="MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
LYFILDKSGSYUHHMWEIYYFVWQCLAHKFISPQLRMSFIVFSVII ALTDGELHEDLFFY
RQGLEELQKYLPGGDYWHEGFERASEQIYYENRQGYRTASVII ALTDGELHEDLFFY
SEREANRSRDLGAIVYCVGWKDFRETGLAIALDSCHFVNDGFQALQGIIHSILKK
SCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLAEKFESVED
TYLLCPAPILKEVGMKAALQVSMNDGLSFISSVIITTTHCSDGSILAIALLILFLLL
ALALLWWFWPLCCTVIIKEVPPPPAEESSEEDDDGLFKKWFTVDASYYGGRGVGGIK
RMEVRWGEKGSTEEGAKLEKAKNARVWPPEQEYEFPEPRHLNNNMREPSSFRKWYSPI
KGKLDALWVLLRKGYDRVSVMRPQFDGTGRCINFTRVKNNQPAKYPLNNAHTSSPPP
APIYTPPPPAPHCPPPPPSAPTPPIPSPSTLPPPPQAPPPNRAPPPSRPPPRFSV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 1090.8; DB 6, Pred. No. 9.3e-308; 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                 840
                                                                                                                                          863
                                                                                                                                                                                 720
                                                                                                                                                                                                                         803
                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                        743
                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                         683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         563
                                                           923
                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

र्

Ş

밁 ર્ 밁

밁

924

δ 문 á 밁 र् 밁 ક 밁 ક B á 밁 S 밁 Ş 밁 8 밁 á 밁 Ş

밁

```
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
PUBMED
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 6
AF279145
LOCUS
                                                                                                                                                                                                                REMARK
COMMENT
FEATURES
                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                           gene
                                                                                                                     SdC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                  Hopkins University, 1650 Orleans Street, Baltimore, MD 3 (bases 1 to 5540)
St. Croix,B., Vogelstein,B. and Kinzler,K.W. Direct Submission
Submitted 'Ara....
                                                                                                                                                                                                              Submitted (09-MAY 2001) Johns Hopkins Oncology Cent
Hopkins University, 1650 Orleans Street, Baltimore,
Sequence update by submitter
On May 9, 2001 this sequence version replaced gi:98
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens tumor complete cds. AF279145
                                                                                                                                                                                                                                                                                                                                                                                 Genes expressed in human tumor Science 289 (5482), 1197-1202
                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 5540)
St. Croix, B., Rago, C.,
Montgomery, E., Lal, A.,
Kingler v w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                                                                                    St. Croix, B., Vogelstein, B. and Kinzler, K.W. Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AF279145.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AF279145
                                                                                                                                                                                                                                                                                                                                                                                                             Kinzler, K.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hominidae;
                                                                                                                                                                                                                                                                                                                                                                          10947988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGTGAGGAAAA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (bases 1 to 5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens (human)
                                                                                                                                                    /organism="Homo sapiens"
/mol type="mRNA"
/db_xref="taxon:9606"
/chromosome="4"
/gene="TEM8"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GI:14017380
                                                                                                                                             .5540
                                                                                                                                                                                                         . 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5540 bp
endothelial r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                     Velculescu, V., Riggins, G.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5540
                                                                                                                                                                                                                                                                                                                                                                                    c endothelium (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ρ mRNA
. marker θ
                                                                                                                                                                                                                                                                                                                                                                                                                     , Traverso,G.,
Lengauer,C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                              gi:9857405
                                                                                                                                                                                                                                                     Center,
                                                                                                                                                                                                                                                                                                                                                                                                                       , Romans, K.E.,
Vogelstein, B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRI
(TEM8)
                                                                                                                                                                                                                                                       Johns
21231,
                                                                                                                                                                                                                                                                                                                 Johns
21231,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-MAY-2001
                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           960
```

Qy 721 GTGAGAGGAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG 780	QY	481 TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTTGTTGGTGTG	Db 444 CANATCCGTCAAGGCCTAGAAGACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG 503  Qy 361 CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG 420	181 GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG	61 CTGGTGCTCATCTGCGCCGGGCAAGGGCAGGAAGGATGGGGTCCAGCCTGCTAC	ORIGIN  Ouery Match  Best Local Similarity 99.8%; Pred. No. 9.3e-308;  Matches 1092; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  Matches 1192; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  Output 1 ATGGCCACGGGAGAGGCGAGAGGCGTTCGGCTTCCTTTGGCCACT 60  ATGGCCACGGCGAGGCGAAGGCCTTCGGCATCGGCTTCCATGGCTCTCTTTGGCCACT 203  Db 144 ATGGCCACGGCGAAGGCGCTAGGGCATCGGCTTCCATGGCTCCTTTGGCCACT 203	TYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGSILAIALLILFLLL ALALLWWFWPLCCTVIIKEVPPPPAEESEEEDDDGLPKKKWPTVDASYYGGRGVGGIK RMEVRWGEKGSTEEGAKLEKAKNARVKMPEQGYKEFBERNLINNMRRPSSPRKWYSPI KGKLDALWVLLRKGYDRVSVMRPQPGDTGRCINFTRVKNNQPAKYPLNNAYHTSSPPP APIYTPPPAPHCPPPPPAPTPPIPSPPTLPPPPQAPPNRAPPPSRPPPRSV"  8ig_peptide
/chromosome="2" /map="294.3" gene 11576 /gene="ANTXR1/NNG1 fusion" CDS 1441403 /gene="ANTXR1/NNG1 fusion"	/db_xref="taxon:9606" /db_xref="taxon:9606" /chromosome="2" /map="2p13.1" source 1233. 1.576 /organism="Homo sapiens" /mol_type="nRNA" /db_xref="taxon:9606"	/orga /db xi /chīc /cell /cell 11	DURNAL UNDUSISHED  REFERENCE 2 (bases 1 to 1576)  AUTHORS Oberthuer, A., Kahlert, Y., Spitz, R., Skowron, M., Westermann, F.,  Mehler, K., Berthold, F. and Fischer, M.  TITLE Direct Submission  JOURNAL Submitted (14.FEB-2005) Pediatric Oncology and Hematology, Cologne Childrens Hospital, University of Cologne, Joseph-Stelzmann-Strasse 9, Cologne, NRW D-50924, Germany FEATURES 11576  BOUNCE 11576	-	RESULT 7  AY928975  AY928975  AY928975  DEFINITION Homo sapiens anthrax toxin receptor/neuroblastoma fusion protein transcript variant 2 (ANTXR1/NNG1 fusion) mRNA, complete cds.  ACCESSION AY928975  VERSION AY928975.1 GI:62870686	OY 1021 TGGTTCTGGCCCCTCTGCTGCTGATTATCAAGGAGGTCCCTCCACCCCCTGCCAAG 1080	Db 924 ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG 983  Oy 841 TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACCACGGTCAGCATGAAC 900

1103

960

1043

900 983

1223 1080 1163

```
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 1094; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_recomb
                                                                                                                                                                                                                                                                                                                                                                                                                             504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                264
                     721
                                                       804
                                                                                          199
                                                                                                                             744
                                                                                                                                                                 601
                                                                                                                                                                                                    684
                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                             624
                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                    564
                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCAGGAAT
GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                      GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                           AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                  TCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                             ACAGCCAGCGTCATCATTGCTTTGACTGATGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATTGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGTGCTCATCTGCGCCGGGCAAGGGGAGGACGCAGGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGCCACGGCGGAGCCGCAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                           ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                               TCAGAGAGGGGATAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                    ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                             CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CANATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                              GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                        AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /translation="MATAERRALGIGFOWLSLATLVLICAGQGGRREDGGPACYGGFD
LYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQI
RQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKK
SCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKIDSVTLMEKPFSVED
TYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTHCSDGSILAIALILFLLL
ALALLWWFWPLCCTVIIKEVPFPPARESEIHIICRKSSRAEIKRLGSVVNLLYDFRND
NPAGSCSVLMRFWEASQIRKFPDAHKV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
/product="anthrax toxin receptor/neuroblastoma
protein transcript variant 2"
/protein_id="AAY18342.1"
/db_xref="G1:62870687"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="ANTXR1/NNG1 fusion"
/note="breakpoint junction"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note="transmembraneous receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1090.4; DB
Pred. No. 1e-307;
0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        œ
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>0</u>
                                                                                              720
                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                203
                                                         863
                                                                                                                                803
                                                                                                                                                                                                        743
                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                               683
                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                        623
                                                                                                                                                                                                                                                                                                                                                                                                                             563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
AY928977
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                       source
                                                                                              source
                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  864 GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hominidae; Homo.

1 (bases 1 to 1658)

Oberthuer, A., Kahlert, Y., Spitz, R., Skowron, Mehler, K., Berthold, F. and Fischer, M.

SAGE-based discovery and characterization of the neuroblastoma cell lines IMR-5, IMR-5/75
                                                                                                                                                                                                                                                                                                                                                    Submitted (14-FEB-2005) Pediatric Childrens Hospital, University of 9, Cologne, NRW D-50924, Germany Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                             2 (bases 1 to 1658)
Oberthuer, A., Kahlert, Y.,
Mehler, K., Berthold, F. an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transcript variant
AY928977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AY928977 1658 bp mRNA linear PRI 10-MAY-2: Homo sapiens anthrax toxin receptor/neuroblastoma fusion protein transcript variant 4 (ANTXR1/NNG1 fusion) mRNA, complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AY928977.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAGTGAGATTCATATAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAGTGAGGAAAATAAAAT 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
 organism "Homo sapien
/mol type="mRNA"
/db xref="taxon:9606"
/chromosome="2"
/map="2p24.3"
                                                                                            /map="2p13.1"
1233. .1658
                                                                                                                                /db_xref="taxon:9606"
/chromosome="2"
                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                           1. 1\overline{2}32
                                                                                                                                                                                                                       /cell_line="IMR-5; IMR-32; IMR-5/75"
/cell_type="neuroblastoma cells"
                                                                                                                                                                                                                                                             /db_xref="taxon:9606"
/chromosome="2"
                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                       1. .1658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI:62870690
                                                                                                                                                                                                                                                                                                                                                                                                                                                    and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1243
                                                                           sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Spitz,R.,
d Fischer,N
                                                                                                                                                                                                                                                                                                                                                                                            Oncology Cologne,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  , Skowron, M., M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Skowron, M.,
                                                                                                                                                                                                                                                                                                                                                                                            and Hematology, Cologne Joseph-Stelzmann-Strasse
```

a novel fusion and IMR-32 Westermann, F.,

gene

in

PRI 10-MAY-2005

Westermann,

ঠ

밁

밁 S

δ 밁 ş 밁 र् 문 ક 밁 र् 밁 ş ક 밁 ঠ

문

á 밁 र् 밁 ঠ

밁

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                              Ś
                                                                                                               밁
                                                                                                                                                                       밁
                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                á
                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 1094; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_recomb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             324
                  661
                                                 744
                                                                               601
                                                                                                               684
                                                                                                                                                541
                                                                                                                                                                                624
                                                                                                                                                                                                              481
                                                                                                                                                                                                                                               564
                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                             504
                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                              444
                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                             384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCACGGCGGAGGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                  AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                   TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTG
                                                                                                                                                                                                                                                                     ACAGCCAGCGTCATCATTGCTTTGACTGATGAAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                     CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTGCTCATCTGCGCCCAGGGCAAGGGGACGCAGGGATGGGGGGTCCAGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                     GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                  ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                               CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                               CANATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                      TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC
                                                 GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                 AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                  TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /translation="MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
LYFILDKSGSVLHHWNEIYFVEQLAHKFISPQLRMSFTVFSTRGTTLMKLTEDREQI
RQGLEBLQKVLDGGDTYMHGEFERASEGIYYSKRRQGYETASVIIALTOGELHBUFFY
SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKK
SCIELLAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKLNGSVTLNEKFFSVED
TYLLCPAPIIKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGSILAIALLILFILL
ALALLWMFWPLCCTVIIKEVPPPPAEESBIHIICRKSSRAEIKRLGSVVNLLXDRRND
NPAGSCSVLMRFWEASQVM"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein transcript variant /protein_id="AAY18344.1" /db_xref="GI:62870691"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .1658
/gene="ANTXR1/NNG1
144. .1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="ANTXR1/NNG1 fusion"
/note="breakpoint junction"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /product="anthrax toxin receptor/neuroblastoma
protein transcript variant 4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'note="transmembraneous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene="ANTXR1/NNG1 fusion"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1090.4; DB Pred. No. 1e-307;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       fusion"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                              443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             203
                                                                                 660
                                                                                                                                                600
                                                                                                                                                                                683
                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                  623
                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                               563
                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                               503
                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6
                                                  803
                                                                                                                 743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                            JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 9
AY928974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                   source
                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        804
                                                                                                                                                                                                                                               Submitted (14-FEB-2005) Pediatric Oncology and Hematology, Cologne Childrens Hospital, University of Cologne, Joseph-Stelzmann-Strasse 9, Cologne, NRW D-50924, Germany Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 1496)
Oberthuer, A., Kahlert, Y., Spitz, R., Skowron, M., Westermann, F.,
Mehler, K., Berthold, F. and Fischer, M.
SAGE-based discovery and characterization of a novel fusion gene
the neuroblastoma cell lines IMR-5, IMR-5/75 and IMR-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AY928974 1496 bp mRNA linear PRI 10-MAY-20 Homo Bapiens anthrax toxin receptor/neuroblastoma fusion protein transcript variant 1 (ANTXR1/NNG1 fusion) mRNA, complete cds.
                                                                                                                                                                                                                                                                                                                             2 (bases 1 to 1496)
Oberthuer, A., Kahlert, Y., S
Mehler, K., Berthold, F. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                  Direct Submission
                                                                                                                                                                                                                                                                                                                                                                            Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AY928974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAGTGAGATTCATATAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAGTGAGGAAAATAAAAT 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                /mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="2"
/map="2p13.1"
1233. 1496
                                                                                                                                                   /cell
                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="2"
                                                                                                                                  /cell
   organism="Homo
                                                                                                  organism="Homo sapiens"
                                                                                                                                  _line="IMR-5; IMR-32; IMR-5/75"
-_type="neuroblastoma cells"
   sapiens"
                                                                                                                                                                                                                                                                                                                              Spitz,R., Skowron,M.,
i Fischer,M.
                                                                                                                                                                                                                                                                                                                                                 Westermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRI 10-MAY-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         923
```

Į.

```
В
                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                          ક
                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                         á
                                                                                                                           문
                                                                                                                                                         Ş
                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
밁
                                                               밁
                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 1090; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_recomb
                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                504
                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                  444
                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                   384
                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     144
                                                                                                                                                                 481
                                                                                                                                                                                                564
 744
                                601
                                                                 684
                                                                                                541
                                                                                                                                 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTAGGAAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGTGCTCATCTGCGCCGGGCAAGGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGGCCACGGCGAGAGCCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCCACGGCGAGCGGAGAGCCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                  GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                  AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                    TCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGGTG 540
                                                                                                                                                                                                                   ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                        CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                  CAPATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                      CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                    TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
 GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                    TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                  ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                 AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /TIBBIATIONS WALFERNALGIGFOWLSLATLVLICAGOGGRREDGGPACYGGFD
LYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQI
RQGLEBLOKVLPGGDTYMHEGFERASEQIYYENROGYBTASVIIALTDGELHEDLFFY
SEREANRSRDLGAIVYCYGVKDFNETQLARIADSKDHVFPVNDGFQALOGIIHSILKK
SCIEILAAESGTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLMEKFPSVEN
TYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTHCSDGSILAIALLILFLLL
ALALLMWFWPLCCTVIIKEVPPPPAEESEDGQPSWLMLRFDEVLGSKFDKEVS"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein transcript variant
/protein_id="AAY18341.1"
/db_xref="GI:62870685"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="ANTXR1/NNG1
144. .1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="ANTXR1/NNG1 fusion"
/note="breakpoint junction"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="ANTXR1/NNG1 fusion"
/note="transmembraneous re/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /map="2p24.3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      product="anthrax toxin receptor/neuroblastoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98.7%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                   TCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1089.4; DB Pred. No. 2e-307;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     --
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       203
                                660
                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                    563
                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                     443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                   743
                                                                                                  600
                                                                                                                                    683
                                                                                                                                                                                                    623
                                                                                                                                                                                                                                                                                                                                     503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                   JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 10
AY928976
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        믕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                    source
                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                               Submitted (14-PEB-2005) Pediatric Childrens Hospital, University of 9, Cologne, NRW D-50924, Germany Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AY928976 mRNA linear PRI 10-MAY-20 Homo sapiens anthrax toxin receptor/neuroblastoma fusion protein transcript variant 3 (ANTXRI/NNG1 fusion) mRNA, complete cds.
                                                                                                                                                                                                                                                                                                                                                 Hominidae; Homo.

1 (bases 1 to 1578)

Obserthuer, A., Kahlert, Y., Spitz, R., Skowron, M.,
Oberthuer, R., Berthold, F. and Fischer, M.
Mehler, K., Berthold, F. and characterization of a r
SAGE-based discovery and characterization of a r
the neuroblastoma cell lines IMR-5, IMR-5/75 and
                                                                                                                                                                                                                                                                    2 (bases 1 to 1578)
Oberthuer, A., Kahlert, Y., S
Mehler, K., Berthold, F. and
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AY928976.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGTGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGTTCTGGCCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGATCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAGTGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCATCCTGGCCATCGCCTGCTGATCCTGTTCCTGCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens (human)
   /organism="Homo sapiens"
/mol type="mRNA"
/db_xref="taxon:9606"
/chromosome="2"
                                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="2"
                                                                                    /cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GI:62870688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1091
                                                                                    _type="neuroblastoma
                                                                                                       line="IMR-5; IMR-32;
                                                                                                                                                                                                                                                                                      Spitz,R.,
nd Fischer,N
                                                                                                                                                                                                                                     Cologne,
                                                                                                                                                                                                                                                                                      <u>`</u>
                                                                                       ; IMR-5/75"
cells"
                                                                                                                                                                                                                                                                                                      Skowron, M.,
                                                                                                                                                                                                                                      and Hematology, Cologne
Joseph-Stelzmann-Strasse
                                                                                                                                                                                                                                                                                                                                                      a novel
                                                                                                                                                                                                                                                                                                                                                                                                        Westermann, F.,
                                                                                                                                                                                                                                                                                                        Westermann, F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRI 10-MAY-2005
                                                                                                                                                                                                                                                                                                                                                          fusion
                                                                                                                                                                                                                                                                                                                                                                       gene
```

1223

'n

1020

1103

1043 900 983 840 923 780 863

960

1163

983 840 923 780 803

720

```
ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
밁
                            á
                                                                   밁
                                                                                                 Ş
                                                                                                                                         밁
                                                                                                                                                                     5
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 1090; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .sc_recomb
                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                384
684
                                541
                                                                     624
                                                                                                       481
                                                                                                                                           564
                                                                                                                                                                               421
                                                                                                                                                                                                                504
                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                        444
                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                     324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                  AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                          CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                    CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAPATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGTGCTCATCTGCGCCGGGCAAGGGGAGGACGCAGGGATGGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                             ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                  CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                          CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                     TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein transcript variant 3"
/protein id="AAY18343.1"
/db_xref="G1:62870689"
/db_xref="G1:62870689"
/translation="MATMERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
/translation="MATMERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
/translation="MATMERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
/translation="MATMERRALGIGFQWLSLATLVLICAGQGGRREDGILEDLREDGILEDLREDGILEDLRESGVLHHWWEIYYVEGGDTYMHEGFERASEGIYYENGSVTIALTDGELLEDLFEY
RGGLEELQKVLPGGDTYMHEGFERASEGIYYENGKOFYRTASVIIALTDGELLEDLFEY
SEREANRSRDLGAIYYCYGYKDEFNETQLARIADSKOHVEFVNDGFQALQGIIHSILKK
SCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVED
TYLLCPAFILKEVGMKAALQVSNNDGLSFISSSVIITTTHCSDGSILAIALLILFILL
ALALLWWFWPLCCTVIIKEVPPPPAEESEDGQPSWLMLRFDEVLGSKPGDVNLLKCCR
DFRQVSLGSENKYKERRR"
1232~1233
1232~1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /product="anthrax toxin receptor/neuroblastoma
protein transcript variant 3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /gene="ANTXR1/NNG1
144. .1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="ANTXR1/NNG1 fusion"
/note="breakpoint junction"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /gene="ANTXR1/NNG1 fusion"
/note="transmembraneous receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98.7%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1089.4; DB 8;
Pred. No. 2e-307;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     fusion"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1578;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>.</u>
                                                                     683
                                                                                                                                             623
                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                443
                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        203
                                 600
                                                                                                         540
                                                                                                                                                                               480
                                                                                                                                                                                                                563
                                                                                                                                                                                                                                                                                          503
                                                                                                                                                                                                                                                                                                                                                                                                                                       383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
AX458372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                ORIGIN
                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                     Young, J.A., Bradley, K.A., Collier, R.J.
Receptor for b. Anthracis toxin
Patent: WO 024628-A 7 13-JUN-2002;
WISCONSIN ALUMNI RESEARCH FOUNDATION (Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX458372
Sequence 7 from
AX458372
                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX458372.1
                                                                                                                                                                                                                                                                                                                                                                                                                      Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGAGTGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAGTGAGGA 1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TEGTTCTGGCCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCATCCTGGCCATCGCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                            /codon_start=1
/protein_id="CAD38351.1"
/protein_id="CAD38351.1"
/db_xref="GI:21725043"
/translation="MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
/translation="MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
/translation="MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD
/translation="MATAERRALGIGFQWLSKGFIVEGTTASVIIALTDGELHEDLFFX
RQGLEELQKVLFGGDTYMHEGFERASEGVIYZBNRQFRTASVIIALTDGELHEDLFFX
SEREANRSRDLGAIVYCYGVLOFNETQLARIADSKOHVFFYNDGFQALQGIIHSILKK
SCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKFFSVED
TYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTHCSLHKIASGPTTAACME"
                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
/13. .1114
                                                                                                                                                                                                note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GI:21725042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2112 bp
Patent W00246228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                  and
                                                                                                                                                                                                                                                                                                                                                                                  Mogridge, J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
```

PAT 08-JUL-2002

1080

1223

1020

1103 960 1043 900

Ġ

```
RESULT 12
BC012074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                          र्
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 99.9
nes 950; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Match
                                                                                                                                       1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                               901
                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                      893
                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                              833
                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
Homo sapiens anthrax toxin receptor
                          BC012074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAGACAGAGAA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGTGCTCATCTGCGCCGGGCAAGGGGAGGCAGGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                   ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                       GATGGCCTCTCTT
                                                                                                                                                                             GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                            TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC 900
                                                                                                                                                                                                                                                                                                                      ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 949.4; DB 6;
Pred. No. 2.3e-266;
                          2112 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                          mRNA
mRNA linear PRI 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2112;
                          PRI 29-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>,,</u>
                                                                                                                                                                                      951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            172
                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                   1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Straubberg, R.L., Peingold, E.A., Grouse, L.H., Derge, J.G.,

Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,

Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,

Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,

Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,

Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,

Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,

Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,

Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,

Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,

McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,

Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,

Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,

Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,

Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,

Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,

Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,

Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,

Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,

Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.

Generation and initial analysis of more than 15,000 full-length

human and mouse cDNA sequences

Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                               Clone distribution: MGC clone distribution information c through the I.M.A.G.E. Consortium/LLNI at: http://image.Series: IRAL Plate: 29 Row: g Column: 3 This clone was selected for full length sequencing becau passed the following selection criteria: matched mRNA gi Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                      Steve Jones, Sarah Barber, Mabel Brown-John, Yaron Butterfield, Andy Chan, Steve S. Chand, William Chow, Alison Cloutier, Ruth Featherstone, Malachi Griffith, Obi Griffith, Ran Guin, Nancy Liao, Kim MacDonald, Amara Masson, Mike R. Mayo, Josh Moran, Ryan Morin, Teika Olson, Diana Palmquist, Anca Petrescu, Anna Liisa Prahbu, Parvaneh Saeedi, JR Santos, Angelique Schnerch, Ursula Skalska, Duane Smailus, Jeff Stott, Miranda Tsai, George Yang, Jacquie Schein, Asim Siddiqui, Rob Holt, Marco Marra.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
Submitted (02-AUG-2001) National Institutes of Health, Mammalian
Gene Collection (MCC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (cDNA clone MGC:19967 IMAGE:4563020), complete BC012074
BC012074.1 GI:15082332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cDNA Library Preparation: Rubin Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium DNA Sequencing by: Genome Sequence Centre,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mammalia; Eutheria; Euarchontoglires;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BC Cancer Agency, Vancouver, info@bcgsc.bc.ca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (bases 1 to 2112)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 2112)
  /db xref="taxon:9606"
/clone="MGC:19967 IMAGE:4563020"
/tissue type="Kidney, renal cell a
/clone_Tib="NIH MGC 14"
/lab host="DH10B-R"
/note="Vector: pOTB7"
1. 2112
                                                                                                                                                              organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Canada
                                                                                                 adenocarcinoma"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>.</u>
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
S
                           밁
                                                 Ś
                                                                                   밁
                                                                                                            ঠ
                                                                                                                                         밁
                                                                                                                                                               8
                                                                                                                                                                                               밁
                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 950; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SdS
                                                                                                                                                                                                 593
                                                                                                                                                                                                                                                       533
                                                                                                                                                                                                                                                                                                             473
                                                                                                                                                                                                                                                                                                                                                                   413
                                                                                                                                                                                                                                                                                                                                                                                                                           353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               173
                             773
                                                      661
                                                                                   713
                                                                                                             601
                                                                                                                                           653
                                                                                                                                                                     541
                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      113
 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCCACGGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                                                   GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCCTGC
                                                                                                                                                              AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                  TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                       ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAGACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATTGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                   CAPATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                      CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTGCTCATCTGCGCCCGGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCACGGCGAGCGGAGAGCCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
 GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                 TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGTTGT
                                                                                                                                                                                                                                                        ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAGCTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                               CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                       ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                            AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /translation="MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFD LYFILDKSGSVLHHWNBIYYFVEQLAHKFISPQLKMSFTVFSTGGTTLMKLTEDREQI RQGLEBLQKVLFGGDTYMHEGFERGYLYFINGGYTASVIIALTDGELHBDLFFY SEREANRSRDLGAIVYFUYGVGVDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKK SCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVED TYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSLHKIASGPTTAACME"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="ANTXR1"
/note="synonyms: FLJ10601, FLJ21776, TEM8,
/db_xref="GeneID:84168"
/db_xref="MIM:606410"
113_.1114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /codon_start=1
product="tumor endothelial marker
protein_id="AAH12074.1"
/db_xref="GI:15082333"
/db_xref="GeneID:84168"
/db_xref="MIM:606410"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene="ANTXR1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 949.4; DB 8;
Pred. No. 2.3e-266;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2112;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          precursor"
  780
                                                                                    772
                                                                                                                660
                                                                                                                                                                      600
                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                        592
                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                532
                                                                                                                                                                                                                                                                                                                                                                      472
                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                            412
                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        172
                                                                                                                                            712
                                                                                                                                                                                                  652
                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 13
AK223273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                              SdD
                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             833
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8125298
```

```
2052 bp mRNA line Homo sapiens mRNA for tumor endothelial marker precursor variant, clone: STM07451.
AK223273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (22-APR-2005) Akiko Tanaka, RIKEN Yokohama Institute, Protein Research Group; 1-7-25 Suehiro, Tsurumi, Yokohama, Kanagawa, 230-0045, Japan (E-mail:aktanaka@riken.jp, URL:http://protein.gsc.riken.jp/, Tel:81-45-503-9452, Fax:81-45-93-9450)
This work was supported in part by the National Project on Protein Structural and Functional Analysis, Ministry of Education, Culture,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Suzuki,Y., Sugano,S., Totoki,Y., Toyoda,A., Tanaka,A. and Yokoyama,S.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sugano,S.

Construction and characterization

5'-end-enriched cDNA library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligo-capping: a simple method to replace eukaryotic mRNAs with oligoribonucleotides Gene 138 (1-2), 171-174 (1994)
                                                                                                                                                                                                                                                                                                 ssugano@k.u-tokyo.ac.jp
URL: http://www.k.u-tokyo.ac.jp/index.html.en.
                                                                                                                                                                                                                                                                                                                                               Sumio Sugano, Yutaka Suzuki
Laborzatory of Functional Genomics Department of Medical Genome
Sciences Graduate School of Frontier Sciences The University of
Tokyo, 4-6-1 Shirokanedai, Minato-ku, Tokyo 108-8639 Japan email:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Suzuki, Y., Yoshitomo-Nakagawa, K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Maruyama, K. and Sugano, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FLI_CDNA; oligo capping.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AK223273.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATGGCCTCTCTTTATCTCCAGTTCTGTCATCACCACCACCACACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (bases 1 to 2052)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               200 (1-2), 149-156
/clone="STM07451"
/tissue_type="stomach mucosa"
/tissue_type="stomach mucosa"
/clone_lib="STM"
/note="cloning vector: pME18SFI
this clone is also named as hss
this clone is also named as hs
c131 . . . . . 1081
/note="Start codon is not ident
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Science and Technology of Japan.
                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                            /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                 organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GI:62898106
                                         o named as hacco
     not identified."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of a full
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Maruyama, K.,
                                                      as hss001003689"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
rker 8 i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Takeda, T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                length-enriched
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Suyama,A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRI 26-APR-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sakaki,Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             e
E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g)
```

ORIGIN

```
Query Match
Best Local Similarity
Matches 951; Conserv
                                                                                                                                                                 731
                                                                                                                                                                                            601
                                                                                                                                                                                                                           671
                                                                                                                                                                                                                                                                                   611
                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                          551
                                                                                                                                                                                                                                                                                                                                                                                                491
                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                       431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       191
                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               131
                      781
                                                     851
                                                                              721
                                                                                                            791
                                                                                                                                      661
911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                  CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGTGCTCATCTGCGCCGGGCAAGGGGAGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGCCACGGCGGAGCGGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
              ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                       GTGAGAGAGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                            ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                             ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                           TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                        ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                  CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAA
                                                        GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCCGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                    TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /protein_id="BAD96993.1"
/db_xref="G1:62898107"
/tdb_xref="G1:62898107"
/tranalation="marrhagerralgigerowlslatlulicagoggrredogerous typildksgsvlhhwneiyyfveolahkpispolarmspivptstrottlmkltedreqi rogleblokvlhegotyrhasvilaltocslhedlefy sereanrskolkolalvycvgvkdhenetolarpysknogyrprasvilaltocslhedlefy sereanrskolkgalvycvgvkdhenetolarlalbskdhvpevndgfoalogiihsilkk scieilaaepsyicagesquvvrgngfpharnvdrulksfkindsvtlnekpfsved tyllcpapilkevgmkaalqvsmndglspisssviittthc"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /evidence=not_experimental
/product="tumor endothelial marker
variant"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  86.0%;
99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 949.2; DB 8;
Pred. No. 2.6e-266;
D; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ထ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2052;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        precursor
                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                          490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
 970
                            840
                                                        910
                                                                                                             850
                                                                                                                                                                     790
                                                                                                                                                                                                660
                                                                                                                                                                                                                            730
                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                    670
                                                                                                                                                                                                                                                                                                                                             610
                                                                                                                                                                                                                                                                                                                                                                                                   550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                    맒
                                                                                                                                ঠ
                                                                                                                                                                    밁
                                                                                                                                                                                         δ
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
```

음 성 음

ર્ 밁 ঠ 밁 δ 밁 ঠ 밁 ş 밁 ঠ 유 ક

음 성

멅 ঠ 밁 र् 밁 δ 음 성

유용

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
AX393256
LOCUS
DEFINITION
ACCESSION
음 성 음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
source
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Mat
Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match
Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1031
                        504
                                                                                                                                                                                              531
                                                                                                                                                                                                                                              471
                                                                                                                                                                                                                                                                                             411
                                                                                                                                                                                                                                                                                                                   144
                                                                                                                                                                                                                                                                                                                                             351
                                                                                                                                                                                                                                                                                                                                                                                            291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           901
                                                                      444
                                                                                               651
                                                                                                                    384
                                                                                                                                                                      324
                                                                                                                                                                                                                    264
                                                                                                                                                                                                                                                                     204
                                                711
                                                                                                                                                                                                                                                                                                                                                                                                                                            935;
                                                                                                                                                                                                                                                                                                                                                                  84
                                                                                                                                                                                                                                                                                                                                                                                                                  24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX393256
Sequence 18
AX393256
AX393256.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Endothelial cell expression patterns Patent: WO 0210217-A 186 07-FEB-2002; The Johns Hopkins University (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    St Croix, B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus
             TCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTCAATGAGACACAGCT
                                                                                                                                                                                                                                           GTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCG
                                                                                                                                                                                                                                                                                                         TTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAACA
                                                                                                                                                                                                                                                                                                                                            CGGGGGCCGCGAGGATGGGGGACCAGCTTGCTACGGAGGATTCGACCTCTACTTCAT
                                                                                                                                                                                                                                                                                                                                                       AGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                          CCTCGGCATCGGCTTCCCAGTGGCTCTCTTTTGGCCACTCTGGTGCTCCATCTGCGCCCGGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                           GCTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCACGAAGGATTCGAGAGGGCCAG
                                                                                                                                                             AGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCTAGAAGA
                                                                                                                                                                                                                                                                                             CCTGGACAAGTCAGGAAGTGTGCTGCACCACTGGAATGAAATCTACTTCGTGGAGCA
                                                                                               TGAGCAGATTTACTATGAGAACAGTCAAGGATACAGGACGGCGAGCGTCATCATCGCGTT
                                                                                                            AGGGACAACTTTAATGAAACTAACTGAGGACAGGGAACAGATCCGACAAGGCCTAGAAGA
  CCGAGACCTTGGTGCGATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                         77.3%;
milarity 87.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            186 from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .5220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GI:19701303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kinzler, K.W. and Vogelstein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent
                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 853.4; |
Pred. No. 3.6e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5220 bp
: W00210217
                                                                                                                                                                                                                                                                                                                                                                                                                                           1; DB 6;
3.6e-238;
nes 136;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5220;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             954
                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1030
                                                                                                                                                                                                                                                                                                                                                                     143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                        443
                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                                               470
                                                                                                                                                                                                                                                                                                                       203
                                                                                                                                                                                                                                                                                                                                              410
                                                                                                                                                                                                                                                                                                                                                                                             350
                                                                                                                                                                                                                                                                                                                                                                                                                     83
   830
                          563
                                                  770
                                                                          503
                                                                                                710
                                                                                                                                                650
                                                                                                                                                                        383
                                                                                                                                                                                               590
                                                                                                                                                                                                                                                530
                                                                                                                                                                                                                                                                       263
                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

д Q	8 8	Query Best L Matche	ORIGIN	JOURNAL FEATURES	REFERENCE AUTHORS	SOURCE	DEFINITION ACCESSION VERSION	RESULT 19	D Qy	8 8	9 V	B &	g Q	β δ	g &	유 &	g Qy
AGGGGGACGCAGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCAT	24 CCTCGGCATCGGCTTCCAGTGGCTCTTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCA 83	Query Match 77.3%; Score 853.4; DB 6; Length 5220; Best Local Similarity 87.3%; Pred. No. 3.6e-238; Matches 935; Conservative 0; Mismatches 136; Indels 0; Gaps 0;	/dr /mc /or	L Patent: WO 0210217-A 300 07-FEB-2002; The Johns Hopkins University (US) Location/Qualifiers 1 5220		Mus musculus (house mouse)  SM Mus musculus  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  Mammalia; Eutheria; Euarchontogires; Glires; Rodentia;	Sequence 300 from Patent W00210217.  AX393370  AX393370.1 GI:19701356	5 AX303370	1044 TGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1094 	984 GATCCTGTTCCTGGTCCTAGCCCTGGCTCTCTGGTGGTTCTGGCCCCTCTGCTGCAC 1043	924 TTCTGTCATCACCACCACACACTGTTCTGACCGTTCCATCCTGGCCATCGCCCTGCT 983	864 AGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAG 923	804 TGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGA 863	744 TGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAA 803	684 ATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACA 743	624 GCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACC 683	564 GGCCCGGATTGCCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCAGGCTCT 623
	Search co Job time	Qy db	Db Qy	ОУ	g Q	Qy Db	Db Qy	Qy Db	D Qy	g Q	₽ <i>Q</i>	₽ <i>&amp;</i>	β <b>δ</b>	р Q	D Q	g 9	ОУ
	completed: December 18, 2005, 11:23:36 ne : 5922.11 secs	1044 TGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGTGAGGAGTGAGGAAAA 1094 	984 GATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTGCTGCAC 1043	924 TICTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCT 983	864 AGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAG 923	804 TGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGA 863	744 TGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAA 803	684 ATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACA 743	624 GCAAGGCATCACTCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACC 683	564 GGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCT 623	504 TCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGGAAAGATTTCAATGAGACACAGCT 563 	444 GACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAATAGGTC 503	384 TGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCCAGC	324 ACTCCAGAAAGTTCTGCCAGGAGAGACACTTACATGCATG	264 AGGAACAACCTTAATGAAACTGACAGAAGAAGAAGAAAATCCGTCAAGGCCTAGAAGA 323 	204 GITGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCG 263	144 TITGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAACA 203 

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Run on:
                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                  Database
                                                                                                                                                                                                                                                                                                           Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                          seq length: 0
seq length: 2000000000
                                                                                                                                                                    N_Geneseq_21:*
1: geneseqn1980s:*
2: geneseqn1990s:*
3: geneseqn2000s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           December 17, 2005, 13:37:50 ; Search time 735.269 Seconds (without alignments)
10006.974 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                               IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
   5:
6:
7:
8:
9:
10:
112:
143:
                                                                                                                                                                                                                                                                                                                                                                                    4996997 seqs, 3332346308 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-1_COPY_104_1207
1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                            GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                        geneseqn2002bs:*
geneseqn2003bs:*
geneseqn2003bs:*
geneséqn2003cs:*
geneseqn2003ds:*
geneseqn2004as:*
geneseqn2004bs:*
geneseqn20005s:*
                                                                                                                        geneseqn2001as:*
geneseqn2001bs:*
geneseqn2002as:*
                                                                                                                                                                                                                                                  summaries
                                                                                                                                                                                                                                                                                                                                                         9993994
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

19	18	17	16	15	14	13	12	11	10	9	8	7	o,	(J)	4	ω	N	<b>-</b>	Regult	•
950.8	950.8	952.4	952.4	952.4	952.4	960.8	960.8	1089.4	1090.6	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1104	Score	
86.1	B 6		86.3	86.3	86.3	87.0	87.0	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	100.0	Query	-
1650	1650	1650	1650	1650	1650	1674	1674	2086	2447	5540	5540	5540	5540	5540	5540	5540	5540	1414	Length	
11	10	11	11	10	10	11	10	4	4	14	14	13	10	10	σ	σ	0	0	8	
ADM64585	ADI00541	ADM64591	ADM64589	ADI00547	ADI00545	ADM64575	ADI00549	AAD05334	AAD05303	AEA29804	ADZ70742	ADR48215	ABX72003	ABX72029	ABV73882	ABL92104	ABL92078	ABV73881	ID	
•		Adm64591 TANGO197	Adm64589 TANGO197	Adio0547 Human TAN	Adi00545 Human TAN	Adm64575 Mouse TAN	Adi00549 Human TAN	Aad05334 Human sec	Aad05303 Human sec	Aea29804 DNA encod	Adz70742 Tumor end	Adr48215 Human tum	Abx72003 DNA encod	Abx72029 DNA encod	Abv73882 Human ant	Abl92104 Human Tum	Abl92078 Human Tum	Abv73881 Human ant	Description	

Novel isolated polypeptide useful for identifying agent that prevents or reduces effect of anthrax toxin on host cell, for treating human or non-human animal suffering from anthrax.

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	
803.8	803.8	803.8	819	853.4	853.4	853.4	853.4	853.4	853.4	867.6	867.6	892.6	912.4	912.4	949	949	949.4	949.4	949.4	949.4	949.4	949.4	949.4	949.4	949.4	
72.8	72.8	72.8	74.2	77.3	77.3	77.3	77.3	77.3	77.3	78.6	78.6	80.9	82.6	82.6	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	
1609	1609	1402	1534	5220	5220	5220	5220	5220	5220	1623	1623	1608	1047	1047	1008	1008	2353	2272	2272	2272	2112	1713	1713	1056	1056	
თ	4	4	10	14	14	10	10	σ	σ	1	10	10	11	10	11	10	11	11	10	w	σ	11	10	H	10	
ADQ98338	AAI58132	AAI59918	ADI00565	AEA29801	ADZ70716	ABX72063	ABX72010	ABL92138	ABL92085	ADM64587	ADI00543	ADI00567	ADM64579	ADI00553	ADM64583	ADI00557	ACN88807	ADM64567	ADI00533	AAA47455	ABV73883	ADM64577	ADI00551	ADM64581	ADI00555	
Adq98338 DNA encod			Adi00565 Human TAN		-			Ab192138 Mouse Tum	Ab192085 Mouse Tum	Adm64587 TANGO197		Adi00567 Human TAN	Human	Human	Human	Human	Breas	Adm64567 Human von	Adi00533 Human TAN	Aaa47455 Human TAN	Abv73883 Human ant	Adm64577 Human TAN	Adi00551 Human TAN	Human	Adi00555 Human TAN	•

## ALIGNMENTS

```
03-OCT-2001; 2001WO-US030941.
                                                                                                                                                 mat_peptide
                                                                                                                                                              sig_peptide
                                                                                                                                                                                                                        Anthrax; toxin; receptor; human; antibacterial; gene; ss
                                                                                                                                                                                                                                      Human anthrax toxin receptor cDNA.
                                                                                                                                                                                                                                                     08-JAN-2003
                                                                                                                                                                                                                                                                   ABV73881;
                                                                                                                                                                                                                                                                                 ABV73881 standard; cDNA; 1414 BP.
                                  WPI; 2002-713235/77.
P-PSDB; ABP54903.
                                                       Young JAT, Bradley KA,
                                                                                                               13-JUN-2002.
                                                                                                                              WO200246228-A2.
                                                                                                                                                                                                           Homo sapiens.
                                                                     (WISC ) WISCONSIN ALUMNI RES FOUND.
                                                                                  05-DEC-2000; 2000US-0251481P
                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                           /*tag= a
/product= "anthrax toxin receptor"
104. .182
/*tag= b
183. .1207
/*tag= c
                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                             /*tag=
                                                         Collier RJ,
                                                        Mogridge JS;
```

```
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CC anthrax toxin receptor (ATR). The CDNA is a PCR amplification product CC from HeLa cells and human placente CDNA is a PCR amplification product CC protective antigen (PA) binds to the ATR at a von Willebrand factor A CC domain located in the extracellular domain of ATR. The invention provides ATR polypeptides and polynucleotides, vectors, host cells, and transgenic CC and knock-out animals. The invention also provides methods for CC identifying molecules that bind the ATR and which reduce the toxicity of CC inthrax toxin. A claimed method for treating anthrax in a human or animal CC involves administering an agent that thibits binding between PA and ATR CC include ATR or a PA-binding fragment of ATR, a PA-binding polypeptide at CC least 80% identical to these, a fusion protein, a monoclonal or CC least 80% identical to these, a fusion protein, a monoclonal or CC polyclonal antibody, a polypeaccharide, a lipid or a nucleic acid. ATR CC polyclonal antibody, a polypeaccharide, a lipid or a nucleic acid. ATR CC polyclonal antibody, a polypeaccharide, a lipid or a nucleic acid. ATR CC polyclonal antibody, a polypeaccharide, a lipid or a nucleic acid. ATR CC polyclonal antibody, a polypeaccharide, a lipid or a nucleic acid. ATR CC polyclonal antibody, a polypeaccharide, a lipid or a nucleic acid. ATR CC polyclonal and as molecular probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Simi
Matches 1104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1414 BP; 394 A; 344 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    present
                                       661
                                                                                                                              601
                                                                                                                                                                           644
                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                    584
                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                              524
                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                     464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 104
                                                                                  704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGGCCACGGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Page
                                                                                                            GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                   ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGATGGGGGTCCAGCCTGCTAC
                            ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                           AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCC
                                                                                                                                                                                                       AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                       TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                   TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTTACTGTTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGACAGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence is that of cDNA encoding a human surface-bound in receptor (ATR). The cDNA is a PCR amplification product
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               45pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                    CTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1104;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 344 G; 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Η,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1414;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     163
                                                                                                                                 660
                                                                                                                                                                           703
                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                       643
                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                              583
                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                     523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
823
                                                                                    763
```

Ś 밁 ş

5 밁 S 밁 Ś

5 밁 S 밁 S 밁 S 밁 δ

문 S 밁 S 밁

main of a ABB90740,

```
RESULT 2
ABL92078
ABL92078
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABL9
AC ABBS
AC ABL9
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC ABBS
AC 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; mouse; rat; TEM; tumour endothelial marker; NEM; PEM; cytost; normal endothelial marker; pan-endothelial marker; immunostimulant; antiangiogenic; tumour; neoangiogenesis; vascularised tumour; polycystic kidney disease; diabetes; retinopathy; rheumatoid arthripsoriasis; gene; ss.
  The invention relates to an isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain tumour endothelial marker (TEM) protein selected from ABB90732, ABB90 ABB90749, ABB90750 and ABB90769. The antibodies which bind to TEM
                                                                                                                                                                   An isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain of a tumor endothel marker (TEM) protein, useful for inhibiting tumor growth.
                                                                                                                                                                                                                                                                                                                                                                                                                  02-AUG-2000; 2000US-0222599P
11-AUG-2000; 2000US-0224360P
11-APR-2001; 2001US-0282850P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABL92078;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABL92078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-FEB-2002
                                                                                                                           Disclosure;
                                                                                                                                                                                                                                                                                                                                                                       OLYU)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                     2002-291856/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                     VIND (
                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAGTGAGGAAAATAAAATAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATGGCCTCTCTTTAICTCCAGTTCTGTCATCATCACCACCACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTCCAGCGCCTATCTTAAAAGAAGTTGGCCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAGTGAGGAAAATAAAATAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCTGCCGAG
                                                                                                                        Page 121-123;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Endothelial Marker polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US024031
                                                                                                                                                                                                                                                                                                                       Kinzler KW,
                                                                                                                                                                                                                                                                                                                                                                       JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5540
                                                                                                                      331pp;
                                                                                                                                                                                                                                                                                                                       Vogelstein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₽P
                                                                                                                      English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PEM; cytostatic;
                                                                                                                                                                                                 endothelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    883
```

និនិនិនិនិនិនិនិនិនិ

```
Query Match
Best Local Simi
Matches 1092;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            proteins have cytostatic, immunostimulant and antiangiogenic activity. They are useful for inhibiting tumour growth, neoangiogenesis in subjects bearing a vascularised tumour polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis and psoriasis. Human, mouse and rat TEM genes and the encoded proteins (ABL92075-ABL92141 and ABB90721-ABB90789) are disclosed, as are marker oligonucleotide sequences: tumour endothelial markers (TEM) ABL99195-ABL92041 and ABL92143-ABL92191; normal endothelial markers (NEM) ABL92042-ABL92074; and pan-endothelial markers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                          804
                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                              684
                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                          624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    144
  841
                                                                                                                864
                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                    744
                                    924
                                                                        781
                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABL91903-ABL91995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCACGGCGGAGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5540 BP; 1601 A; 1306
                                                                                                                                                                                                                                                                                            GTGAATGACGGCTTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                    AAAGATTTCAATGAGACACAGCTGGCCCGGGATTGCCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATTCATTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGTGCTCATCTGCGCCGGCCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGGCCACGGCGGAGCGGAGAGCCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                            GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                  ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                    GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                          TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTTTATTGT
TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                      ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                              ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                AGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; 1187 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1090.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1446 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    203
                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                        803
                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                743
                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                            683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
    900
                                      983
                                                                            840
                                                                                                                  923
                                                                                                                                                                                              863
```

밁 र्

밁 र् 밁 र्

δ

S 밁 ફ 밁 δ 밁 ঠ 밁 á 밁 S 밁 ঠ 밁

밁

á 밁 문 Ś 밁 ફ

S

```
ARESULT 3
ARISITAT 3
ARISITAT 3
ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATION ARISITATIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
The invention relates to an isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain of a tumour endothelial marker (TEM) protein selected from ABB90732, ABB90740, ABB90749, ABB90769. The antibodies which bind to TEM proteins have cytostatic, immunostimulant and antiangiogenic activity. They are useful for inhibiting tumour growth, neoangiogenesis in subjects bearing a vascularised tumour, polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis and psoriasis. Human, mouse and rat TEM genes and the encoded proteins (ABL92075-ABL92141 and ABB90721-ABB90789) are disclosed, as are marker oligonuleotide sequences: tumour endothelial markers (TEM) ABL92194-ABL92041 and ABL92143-ABL92191; normal endothelial markers (NEM) ABL92042-ABL92074; and pan-endothelial markers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; mouse; rat; TEM; tumour endothelial marker; NEM; PEM; cytost normal endothelial marker; pan-endothelial marker; immunostimulant; antiangiogenic; tumour; neoangiogenesis; vascularised tumour; polycystic kidney disease; diabetes; retinopathy; rheumatoid arthri
                                                                                                                                                                                                                                                                                                                                                                                                                     An isolated molecule comprising an antibody variable region specifically binds to an extracellular domain of a tumor enc marker (TEM) protein, useful for inhibiting tumor growth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-AUG-2000; 2000US-0222599P
11-AUG-2000; 2000US-0224360P
11-APR-2001; 2001US-0282850P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABL92104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          St Croix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-AUG-2001; 2001WO-US024031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200210217-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         psoriasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABL92104;
                                                                                                                                                                                                                                                                                                                                                                    Claim 30; Page 207-209; 331pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OLYU) (OLYU)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002-291856/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABB90750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₽,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAGTGAGGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGTTCTGGCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACCACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Endothelial Marker polynucleotide SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kinzler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vogelstein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
```

```
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SXS
                                                                                                                                                             S
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
S
                            밁
                                                  ş
                                                                                 밁
                                                                                                         S
                                                                                                                                        밁
                                                                                                                                                                                             밁
                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Simi
Matches 1092;
                           1044
                                                                                                            841
                                                                                                                                        924
                                                                                                                                                                                               864
                                                                                                                                                                                                                                                      804
                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                          744
                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                 684
                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                       624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    204
 961
                                                    106
                                                                                 984
                                                                                                                                                                   781
                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABL91903-ABL91995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5540
                                                                                                                                                                                                               GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCACTGGAAT
                                            GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                  TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                      ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                    ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                             GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                   APAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                           ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGTGCTCATCTGCGCCGGGCAAGGGGGGACGCAGGGAGGATGGGGGTCCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGCCCACGCCGAGAGCCCTCGCCATCGCTTCCAGTGGCTCTCTTTTGCCACT
 TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                         ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                               GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                      ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                           GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                        TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                    TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP; 1601 A; 1306 C; 1187 G; 1446 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98.8%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1090.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                  1043
                                                                                                                                                                                                                                                                                                             803
                                                                                                                                                                                                                                                                                                                                                                 743
                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                        683
                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          203
  1020
                                                     960
                                                                                                              900
                                                                                                                                         983
                                                                                                                                                                   840
                                                                                                                                                                                               923
                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                      863
                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
```

```
RESULT 4
ABV73882
ID ABV7
XX ABV7
XX ABV7
XX ABV7
XX Anth
OS Homc
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX Anth
XX W02(
PM W02(
PM W03-(
PM W01)
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX UNI
XX U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
The present sequence is that of cDNA encoding a human anthrax toxin creceptor (ATR). The cDNA, previously designated TEM8, was originally consolated by PCR from HeLa cell and human placenta cDNA libraries. It was identified in a database screening using a newly isolated human cDNA (see CC ABV73881) which encodes an ATR (see ABP54903) that is identical to the CT EM8 polypeptide except in the cytoplasmic tail, suggesting differential CC splicing of a primary mRNA transcript. TEM8 was not previously identified CC as an ATR. The invention provides ATR polypeptides and polynuclectides, CC host cells, vectors, and transgenic and knock-out animals. It also CC provides methods for identifying molecules that bind the ATR and which CC reduce the toxicity of anthrax toxin. A claimed method for treating cC anthrax in a human or animal involves administering an agent that CC inhibits binding between anthrax toxin protective antigen (PA) and ATR at 1 level effective to reduce the severity of anthrax. Suitable agents CC include the TEM8 polypeptide or a PA-binding fragment of it, a PA-binding CC monoclonal or polycional antibody, a polysaccharide, a lipid or a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel isolated polypeptide useful for identifying reduces effect of anthrax toxin on host cell, for human animal suffering from anthrax.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-OCT-2001; 2001WO-US030941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200246228-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Anthrax; toxin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human anthrax toxin receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-JAN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABV73882;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABV73882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 32-37; 45pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-DEC-2000; 2000US-0251481P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (WISC ) WISCONSIN ALUMNI RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002-713235/77.
DB; ABP54904.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAGTGAGGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bradley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= a
/product= "anthrax toxin receptor"
/44. .224
/*tag= b
/*tag= c
/*tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      receptor; human; TEM8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Collier RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mogridge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antibacterial; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         agent that prevents treating human or no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ts or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1163
```

Mon

ន្តន្តន

```
Query Match
Best Local Similarity
Matches 1092; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            acid. ATR polynucleotides can also be used in the recombinant production of ATR polypeptides, and as molecular probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                 864
                                                                                                                                                                                                                                                               804
                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                   744
                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                  684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            204
                               901
                                                                                             841
                                                                                                                               924
                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144
                                                            984
                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTTTATTGTTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTGCTCATCTGCGCCGGGCAAGGGGGAGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5540
               GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                  ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGATCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTTTATTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                 TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                     ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                   GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                   GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                     AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                     AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 1601 A; 1306 C; 1187 G; 1446 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1090.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ċ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                1043
                                                                                                 900
                                                                                                                               983
                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              263
                                                                                                                                                                                                 923
                                                                                                                                                                                                                                                                   863
                                                                                                                                                                                                                                                                                                                                   803
                                                                                                                                                                                                                                                                                                                                                                                                    743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    683
```

8 5 ₽ ঠ 밁 ঠ 밁 ঠ 밁 ঠ 밁 ð 밁 5 밁 8 밁 ð 밁 δ 밁 ક 밁 5 밁 र् 밁 श

S 밁 S

믔

Query Match 98.4 Best Local Similarity 99.4 Matches 1092; Conservative

98.8%;

Score 1090.8; Pred. No. 0; C; 1187

0

Mismatches

Indels Length Ģ 0

٥,

Gaps

0,

Sequence

B₽;

1601 A;

1306

ů,

1446 T; ВB ۲. 10; 0

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                       The present invention relates to a novel method for the isolation of endothelial cells (ECs), and the identification of genes expressed in normal and tumour ECs. Tumour endothelial marker (TEM), normal endothelial marker (PEM) genes are identified in human ECs. The human EC marker proteins and the polynucleotide sequences encoding them are useful for detecting, diagnosing or treating tumours as well as polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis, and psoriasis. They are also useful for inhibiting meanglogenesis or tumour anglogenesis, for inducing an immune response to tumour endothelial cells in a patient, or for identifying candidate drugs for treating tumours. The present sequence represents a human TEM or NEM gene of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; endothelial cell; BC; tumour endothelial cell; TEM; NEM; Tumour endothelial marker; pormal endothelial marker; PEM; pan-endothelial marker; polycystic kidney disease; psoriasis; pan-endothelial marker; polycystic kidney disease; psoriasis; diabetic retinopathy; rheumatoid arthritis; tumour angiogenesis; neoangiogenesis; immune response; cytostatic; antidiabetic; gene; ophthalmological; antirheumatic; antiarthritic; antipsoriatic; ds
                                                                                                                                                                                                                                                                           New purified human transmembrane protein, designated as tumor endothelial marker (TEM) 3, useful for detecting, diagnosing or treating tumors, polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis or psoriasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-APR-2001; 2001US-0282850P
06-FEB-2002; 2002US-0354262P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo
                                                                                                                                                                                                                                              Disclosure;
                                                                                                                                                                                                                                                                                                                                                            P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                          Carson-Walter E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-APR-2002; 2002WO-US008253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200283874-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABX72029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABX72029
                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYJO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                            UNIV JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGAGTGAGGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCCTCCACCCCCCTGCCGAG 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                          Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human tumour endothelial marker TEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                                                                                              223-225;
                                                                                                                                                                                                                                                                                                                                                                                                              St
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA;
                                                                                                                                                                                                                                                                                                                                                                                                            Croix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5540
                                                                                                                                                                                                                                            374pp;
                                                                                                                                                                                                                                                                                                                                                                                                              Kinzler
                                                                                                                                                                                                                                            English
                                                                                                                                                                                                                                                                                                                                                                                                              ΚΨ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            dg.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1163
```

밁 á 밁 á

á

```
1104
                                                                                                                                              1044
                                                                                                         961
                                                                                                                                                                                  901
                                                                                                                                                                                                                         984
                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                   924
                                                                                                                                                                                                                                                                                                                                                                          864
                                                                                                                                                                                                                                                                                                                                                                                                                                                  804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       144
                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                     TGGTTCTGGCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCCTCCACCCCCCTGCCGAG
                                                                                            TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCCTGGCTCTCCTCTGG
                                                                                                                                                GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                        TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAGCCAGCGTCATCATTGCTTTGACTGATGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCTTTATTGTTTTCTCCACCCGAGGAACCAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTTTATTGTTTTCTCCACCCGAGGAACCAACCTTAATGAAACTGACAGAGAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGATGGGGGGTCCAGCCTGCTAC
                                                                      recarecregecarecerearecrerrecreerecrageceregererecres
                                                                                                                                                                                                                         TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                       ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
TGGTTCTGGCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                    1163
                                                                                                         1020
                                                                                                                                              1103
                                                                                                                                                                                                                         1043
                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                   983
                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                            923
                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                    863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
```

Ś

Ś 멍 Ş 밁 Ş 밁 Ś 밁 á 밁

밁

δ

밁

밁 δ 밁 Ş 밁

밁 δ 밁 S 유 5

밁

S

밁 ş В

```
RESULT 6
ABX72003
ID ABX7
XX ABX7
XX ABX7
XX ABX7
XX ABX7
XX DNA
XX DNA
XX Huma
XX Tumc
XX Tumc
XX Homc
X Hom
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH DD 24-(
PH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                     δ
                                                                                                                  片
                                                                                                                                                                      8
                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 1092; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a novel method for the isolation of endothelial cells (ECs), and the identification of genes expressed in normal and tumour ECs. Tumour endothelial marker (TEM), normal endothelial marker (NEM), and pan-endothelial marker (PEM) genes are identified in human ECs. The human EC marker proteins and the polynucleotide sequences encoding them are useful for detecting, diagnosing or treating tumours as well as polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis, and psoriasis. They are all useful for inhibiting meoangiogenesis or tumour angiogenesis, for inducing an immune response to tumour endothelial cells in a patient, for identifying candidate drugs for treating tumours. The present sequence represents a human TEM or NEM gene of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; endothelial cell; EC; tumour endothelial cell; TEM; NEM; Tumour endothelial marker; normal endothelial marker; PEM; pan-endothelial marker; polycystic kidney disease; psoriasis; piediabetic retinopathy; rheumatoid arthritis; tumour angiogenesis; neoangiogenesis; immune response; cytostatic; antidiabetic; gene; ophthalmological; antirheumatic; antiarthritic; antipsoriatic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New purified human transmembrane protein, designated as tumor endothelial marker (TEM) 3, useful for detecting, diagnosing or treating tumors, polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-APR-2001; 2001US-0282850P
06-FEB-2002; 2002US-0354262P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 117-120; 374pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   polycystic
psoriasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carson-Walter E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABX72003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-APR-2002; 2002WO-US008253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNHOF AIND ( OFAD)
                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAGTGAGGAAAA 1094
CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                            5540 BP; 1601 A; 1306 C; 1187 G; 1446 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                       ATGGCCACGGCGAGAGCGCAGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tumour endothelial marker TEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entry)
                                                                                                                                                                                                                                                                   98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Croix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В,
                                                                                                                                                                                                                                       ٥,
                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                      Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ₽₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kinzler
                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                 1090.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Œ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Vogelstein
                                                                                                                                                                                                                                                                                                     DB 10;
                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                     5540;
                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            also
                                                             120
                                                                                                                                                                                  60
                                                                                                                        203
                                                                                                                                                                                                                                          0
```

δ 망

ş

```
ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                              Ś
                                                                                                              밁
                                                                                                                                      á
                                                                                                                                                                       문
                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                  ঠ
                                                     밁
                          1081
                                                       1164
                                                                                   1021
                                                                                                                1104
                                                                                                                                                                         1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                            961
                                                                                                                                                                                                     106
                                                                                                                                                                                                                                  984
                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                            924
                                                                                                                                                                                                                                                                                                                                                       864
                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                804
                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCGGATTTGACCTGCACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                            ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                        GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                    TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC 900
                                                                                                                                                                                                                                                                                                                                                                                                                  ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAMATECGTEMAGGEETAGAAGAACTECAGAAAGTTETGECAGGAGGAGACAETTACATG
                GAGAGTGAGGAAAA
                                                                         TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1080
                                                                                                                TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                            TCCATCCTGGCCATCGCCCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG 1020
                                                                                                                                                                          GATGGCCTCT
                                                                                                                                                                                                     GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT 960
                                                                                                                                                                                                                                  TGTCCAGCGCCTATCTTAAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                            ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                       GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
GAGAGTGAGGAAGA
                                                       TGGTTCTGGCCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCTGCCGAG
                          1094
1237
                                                          1223
                                                                                                                                                                            1103
                                                                                                                                                                                                                                     1043
                                                                                                                 1163
                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          323
                                                                                                                                                                                                                                                                                                983
                                                                                                                                                                                                                                                                                                                                                         923
                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                  863
                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
```

RESULT 7 ADR48215 ID ADR4

ADR48215

standard; cDNA; 5540

S

ATGGCCACGGCGGAGGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT

Query Match Best Local Sim Matches 1092;

Similarity

98.8%;

Score 1090.8; Pred. No. 0;

BB

0,

Mismatches

'n 13;

Indels Length

<u>,</u>

Gaps

60 0 Sequence

5540

B₽;

1601 A; 1306 C; 1187 G; 1446 T; 0 U; 0 Other;

```
The present invention describes a method for detecting a pancreatic contacting the biological sample with a polynucleotide that selectively contacting the biological sample with a polynucleotide that selectively comparises to a sequence at least 80% identical to a sequence as shown in carry one of Tables 3 to 25 in the specification or having the GenBank concer in a human or animal subject being tested, determining the concer for concer in a human or animal subject having a pancreatic cancer will survive, or determining the suitability of a subject having a pancreatic cancer for concertance of the suitability of a subject having a pancreatic cancer for concertance of the suitability of a subject having a pancreatic cancer associated concertance of the subject having a pancreatic cancer. A pancreatic cancer associated transcript that concertance of the subject having a pancreatic cancer. A pancreatic cancer associated transcript has cytostatic activity, and can be used in concertance of the subjectide, an antibody that binds to the isolated polypeptide or an antibody that binds to the isolated polypeptide can be used for diagnosing or prognosing pancreatic cancer. The prognostic or diagnostic methods are useful for the early detection of pancreatic cancer or the metastases, and for monitoring the progress of disease such as during remission or following surgery or chemotherapy. The present concertance encodes human tumour endothelial marker 8 precursor (TEM8), which is used in the exemplification of the present divention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Detecting pancreatic cancer-associated transcript in a biological sample, useful for diagnosing or treating the disease, comprises contacting the sample with a polynucleotide that selectively hybridizes to a specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cbs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-635591/61.
P-PSDB; ADR48216.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cytostatic; gene therapy; protein therapy tumour endothelial marker 8 precursor; Ti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pancreatic o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 70; SEQ ID NO 3; 263pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Biankin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-FEB-2004; 2004WO-AU000194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human tumour endothelial marker 8 precursor encoding cDNA SEQ:3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-FEB-2003; 2003AU-00900747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2004074510-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADR48215;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GARV-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GARVAN INST MEDICAL RES
                                     used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cancer-associated transcript; pancreatic cancer; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Segara D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first
                                     in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
144 .1838
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /product= "tumour endothelial marker 8 precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Henshall
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sutherland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TEM8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TEM8)"
```

```
1104
1224
                                                                                                                                                                                                             1044
                                                                                                                                                                          961
                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                 984
                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                     924
                                                                                                                                                                                                                                                                                                                                                                                                                          864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                144
                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                           TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGAGAGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCGADATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCCAGCGTCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC
                    GAGAGTGAGGAAAA 1094
                                                                                        TGGTTCTGGCCCCTCTGCCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                               GATGGCCTCTCTTTTATCTCCAGTTCTTGATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                         TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                     ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                           ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CANATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
GAGAGTGAGGAAGA
                                                                     TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                         TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                   TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                          1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                     1223
                                                                                                      1080
                                                                                                                                         1163
                                                                                                                                                                                                             1103
                                                                                                                                                                                                                                                                                   1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              263
                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                      983
                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                            923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         743
```

밁

S 밁 S

밁 S 밁 S

δ

밁

S

밁

Ş 밁

밁

밁 δ

δ

á

밁 5 В 5

S

용

264

밁 S 밁 S 문 Ş 밁 á 망

뭐

```
RESULT 8
ADZ777
XX
ADZ777
XX
ADZ77
XX
A
유 성
                                                                                  밁
                                                                                                                                               S
                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 1092; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention describes acquiring (M1) a pathological condition related gene, preferably chondrogenic differentiation control related gene Runx2/Cbfa1, comprising forcibly expressing a transcriptional factor related to pathological condition, preferably Runx2/Cbfa1 in a cell strain or a primary culture cell lacking the transcriptional factor, and screening for the gene whose expression is induced or suppressed. (M1) is useful for acquiring a pathological condition related gene, preferably chondrogenic differentiation control related gene Runx2/Cbfa1. Polynucleotides detailed in the invention are useful for screening a preventive and/or therapeutic agent of bone and/or articular disease suc as osteoarthritis. This sequence encodes tumor enothelial marker B precursor (Tem8) associated with isolation of a pathological condition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   osteopathic; antiarthritic; gene expression; differentiation; transcription; bone disease; osteoarthritis; antiarthritic; osteopathic; musculoskeletal disease; tumor enothelial marker 8 precursor; Tem8; gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Acquiring chondrogenic differentiation control related gene Runx2/Cbfa1, by forcibly expressing transcriptional factor related to pathological condition in cell strain lacking transcriptional factor and screening fo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (TEIJ-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADZ70742
                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-OCT-2003; 2003JP-00359172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2005038022-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2005-322866/33.
DB; ADZ70743.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         endothelial marker 8
                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TEIJIN
KOMORI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard;
                        GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCGGAAT
                                                                                                                                                                                                                                            ATGGCCACGGCGGAGAGAGACCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                                                        CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC
                                                                                                                                 CTGGTGCTCATCTGCGCCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                              ATGGCCACGGCGGAGCGGAGGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ
                                                                                                                                                                                                                                                                                                                    98.8%;
nilarity 99.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kanatani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2004WO-JP015879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first
                                                                                                                                                                                                                                                                                                                                                                                                                               BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PHARMA LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ő
                                                                                                                                                                                                                                                                                                                                                                                                                            1601 A; 1306 C; 1187 G; 1446 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      357pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Yoshida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         precursor (Tem8)
                                                                                                                                                                                                                                                                                                                      ٥,
                                                                                                                                                                                                                                                                                                                      Score 1090.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zanma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A,
                                                                                                                                                                                                                                                                                                                                                                           DΒ
                                                                                                                                                                                                                                                                                                                      2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kobayashi
                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                            u; o
                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                               Other;
                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Yamana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>~</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and
1) is
                                                         180
                                                                                                                                                                                                                   203
                                                                                                                                                                                                                                                                        60
                                                                                                           263
                                                                                                                                                            120
```

```
RESULT 9
AEA29804
ID AEA2
XX
AC AEA2
XX
AC 11-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                       ঠ
                                                                                                                                                   밁
                                                                                                                                                                    ર્
                                                                                                                                                                                                밁
                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                        ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
 11-AUG-2005
                                              AEA29804
                                                                                                                                                    1164
                                                                                                                                                                                                 1104
                                                                                                        1224
                                                                                                                             1081
                                                                                                                                                                          1021
                                                                                                                                                                                                                                                1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                             984
                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                          924
                                                                                                                                                                                                                                                                                                                                                                                        864
                                                                                                                                                                                                                                                                                                                                                                                                                                       804
                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                         ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGTTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                      GAGAGTGAGGAAAA 1094
                                                                                                                                                                                                                                                GATGGCCTCTCTTTATCTCCAGGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                             GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADAGATTTCAATGAGACACAGCTGGCCCCGGATTGCCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                              standard;
                                                                                                        GAGAGTGAGGAAGA 1237
                                                                                                                                                                    TGGTTCTGGCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCAG
                                                                                                                                                                                                TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                           TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                           ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                          GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
 (first entry)
                                               DNA:
                                               5540
                                                                                                                                                                                                   1163
                                                                                                                                                                                                                                                 1103
                                                                                                                                                                                                                                                                                              1043
                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       443
                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                            983
                                                                                                                                                                                                                                                                                                                                                                                           923
                                                                                                                                                                                                                                                                                                                                                                                                                                        863
                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    383
```

8 8 8 8 8

121

Matches 1092;

Conservative

0

Mismatches

2

0

0

144

μ

61

음 성

241

TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA

203 120 263 180 323 323 383

GAAATCTATTACTTIGTGGAACAGTIGGCTCACAAATTCATCAGCCCACAGTTGAGAATG

GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG

GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCACTGGAAT

```
The invention relates to novel compositions and methods for the synergistic induction of antitumor immunity. The invention discloses a comparistic effect between vaccines encoding a tumor-associated antigen and vaccines encoding a tumor endothelial marker 8 (TEM8). The invention further includes a method of inducing anti-tumor immune responses in an cited above or dendritic cells comprising a nucleic acid or protein celeted from the composition cited above and proteins encoded by the vectors of the composition cited above and proteins of the present invention are useful in the field of anti-tumor immunity, in particular for inducing an anti-tumor immune response by targeting both tumor-cassociated antigens and tumor endothelia, hence have cytostatic activity. This polynucleotide sequence represents the DNA encoding a human tumor cendothelial marker 8 protein of the invention.
Query Match
Best Local &
                                                                                                                                                                                                                                                                                                           New composition useful as a vaccine for inducing anti-tumor immune response and having a vector with a nucleic acid sequence encoding tumor-associated antigen and/or encoding a tumor endothelial market
                                          Sequence 5540 BP; 1601 A; 1306 C; 1187 G; 1446
                                                                                                                                                                                                                                                                                    Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-NOV-2003; 2003US-0519498P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synergistic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-NOV-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2005048943-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                         (SLOK )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                   2005-395941/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gistic induction; tumor-associated antigen; endothelial marker 8; immune stimulation; of
                                                                                                                                                                                                                                                                                                                                                                                                             ۵,
                                                                                                                                                                                                                                                                                                                                                                                                                                           SLOAN KETTERING INST CANCER
 Similarity
                                                                                                                                                                                                                                                                                    SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                             Houghton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2004WO-US038022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a human tumor endothelial marker 8 protein.
                                                                                                                                                                                                                                                                                    NO 4; 54pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= a
/product= "Human tumor
                                                                                                                                                                                                                                                                                                                                                                                                             ×
98.88;
                                                                                                                                                                                                                                                                                                                                                                                                             Concetti A,
                                                                                                                                                                                                                                                                                    English
Score 1090.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                            RES
                                                                                                                                                                                                                                                                                                                                                                                                                Venanzi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    endothelial
                BB
                                                                                                                                                                                                                                                                                                                                                                                                                ¥
                14;
                                        Ή,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic;
                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    marker
              Length
                                          Ç;
                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    œ
                 5540;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene;
                                                                                                                                                                                                                                                                                                                 marker 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

```
Human; secreted protein; proliferative disorder; cancer; tumour; foetal abnormality; developmental abnormality; haematopoletic diffumune system disorder; AlDS; autoimmune disease; rheumatoid art inflammation; allergy; neurological disorder; Alzheimer's disease
                                                                                                                              17-JUL-2001
                                                                                                                                                                                                      AAD05303 standard; cDNA; 2447
                                                                                                                                                                                                                                                                                                                                                                                                                                        1104
                                                                                                                                                                                                                                                                                                                                1081
                                                                                                                                                                                                                                                                                                                                                                    1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                            secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                        TGGTTCTGGCCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA 443
                                                                                                                                                                                                                                                                                              GAGAGTGAGGAAGA 1237
                                                                                                                                                                                                                                                                                                                               GAGAGTGAGGAAAA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCATCCTGGCCATCGCCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                              (first entry)
                                                                                        protein-encoding gene 4 cDNA clone
                                                                                                                                                                                                      ВP
                      rheumatoid arthritis;
                                                                                          HWLFR02,
                                                                                          SEQ
                                       disorder;
                                                                                            Ħ
                                                                                          NO:14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                503
                                                                                                                                                                                                                                                                                                                                                                                                        1080
                                                                                                                                                                                                                                                                                                                                                                                                                                          1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
```

S 밁

S 문 밁 δ

δ

밁 δ

밁 ঠ Ş

밁 á 밁

밁

δ 밁 밁 δ

S

δ

밁 S 밁 8 片

밁

```
chemotaxis; food
                                                                                                                                                                   skin disorder; psoriasis; sepsis; diabetes; atherosclerosis; cardiovascular disorder; anglogenic disorder; kidney disorder; gastrointestinal disorder; pregnancy-related disorder; endocrine disorder; infection; wound healing; vulnerary; cell culture; chemotaxis; food additive; gene therapy; binding partner identification;
                                                                        Homo
                                                                                                                                                                                                                                                                                                                 Parkinson's disease; cognitive disorder; schizophrenia; asthma; skin disorder; psoriasis; sepsis; diabetes; atherosclerosis;
                                                                        sapiens
                                                                                                                                             88.
Location/Qualifiers
```

```
WPI; 2001-308778/
P-PSDB; AAE01439.
                                                                         05-NOV-1999;
30-JUN-2000;
                                                                                                       01-NOV-2000; 2000WO-US030045
                                                                                                                                                                                       mat_peptide
                                                                                                                                                                                                            sig_peptide
                                                                                                                                                WO200134626-A1
                                                   (HUMA-) HUMAN GENOME SCI INC.
           2001-308778/32.
                                MS,
                              Komatsoulis GA,
                                                                       99US-0163581P.
2000US-0215133P.
                                                                                                                                                                                                 /product=
140. .220
/*tag= b
                                                                                                                                                                            221. .1348
/*tag= c
                                                                                                                                                                                                                                            140. .1351
                                                                                                                                                                    /product=
                                                                                                                                                                                                                                   /*tag=
                                                                                                                                                                       "Mature
                                                                                                                                                                                                                         "Human
                                Moore
                                                                                                                                                                                                                         secreted
                              PA,
                                                                                                                                                                     human
                                Birse
                                                                                                                                                                     secreted
                                                                                                                                                                                                                         protein"
                                Ê
                                                                                                                                                                    protein"
                                 Ž.
                                4
```

New nucleic acid molecules encoding 28 human sec diagnosing, preventing, treating or ameliorating used as food additives or preservatives. secreted proteins for ting medical conditions

Claim 1; Page 425-426; 562pp; English.

AAD05310-AAD05379 represent cDNAs corresponding to 28 human secreted protein genes, and AAE01436-AAE01513 represent the proteins they encode. CC AAE01514-AAE01544 represent human secreted protein fragments or variants. CC The genes and their secreted proteins are useful for preventing, treating cor ameliorating medical conditions, e.g., by protein or gene therapy. CC Pathological conditions can be diagnosed by determining the amount of the new genes. Specific uses are described for each of the 28 genes, the new genes. Specific uses are described for each of the 28 genes, cancer, tumours, foetal and developmental abnormalities, disorders, cancer, tumours, foetal and developmental abnormalities, autoimmune disorders, cancer, tumours, foetal and developmental abnormalities, cancinguistic disorders, diseases of the immune system, AIDS, autoimmune diseases (e.g., rheumatoid arthritis), inflammation, allergies, cognitive disorders (e.g., Alzheimer's disease, Parkinson's disease), cognitive disorders, schizophrenia, asthma, skin disorders (e.g., pregnancy-related disorders, endocrine disorders, and infections. The proteins can also be used to aid wound healing and epithelial cell corresponding to the supporting cell culture of primary tissues, to regenerate tissues, to identify their cognate ligands or binding partners, and in chemotaxia, and can be used as a food additive or protein of the invention can be used as a food additive or addicimmunoassay or enzyme linked immunosorbent assay (ELISA). The company tissues of the invention can be used in alleviating symptoms associated inventions and inchemonassay or enzyme linked immunosorbent assay (ELISA). The

Sequence 2447 BP; 673 Ą 562 0 Ö 625 H, ς;

```
ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                 ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
밁
                            ঠ
                                                                                     밁
                                                                                                                    ş
                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 1093; Conserv
1100
                                                                                     1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                860
                                                                                                                                                                                                                                                                                                                                                                                                                                                             800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   140
                                        196
                                                                                                                                                                                                                                                                        920
                                                                                                                                   901
                                                                                                                                                                                980
                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGTGCTCATCTGCGCCGGGCAAGGGGAGGGACGCAGGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAPATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGTGCTCATCTGCGCCGGGCAAGGGGAACGCAGGGAGGATGGGGGTCCAGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                               GTGAGAGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCCACGGCGGAGCGGAGCCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                       TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCCTCTGG 1020
                                                                                                                    GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                         ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAGCCAGCGTCATCATTGCTTTTGACTGATGGAGAAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
recarecrese are enteres are enteres and enteres and enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are enteres are en
                                                                                          GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                          TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                          ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98.8%;
99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1090.6;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                                                          1099
                                                                                                                                       960
                                                                                                                                                                                  1039
                                                                                                                                                                                                                                                                                                                                                                     919
                                                                                                                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                             979
                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                               859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             instant abnormality; developmental abnormality; haematopoietic disorder; immune system disorder; AIDS; autoimmune disease; rheumatoid arthritis; inflammation; allergy; neurological disorder; Alzheimer's disease; parkinson's disease; cognitive disorder; schizophrenia; asthma; skin disorder; psoriasis; sepsis; diabetes; atherosclerosis; cardiovascular disorder; anglogenic disorder; kidney disorder; gastrointestinal disorder; pregnancy-related disorder; cell culture; endocrine disorder; infection; wound healing; vulnerary; cell culture; chemotaxis; food additive; gene therapy; binding partner identification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAD05334;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAD05334 standard;
                                                                                                                                                                         05-NOV-1999; 99US-0163581P
30-JUN-2000; 2000US-0215133P
                                                                                                                                                                                                                                                                                           mat_peptide
                                                                                                                                                                                                                                                                                                                sig_peptide
                                Claim
                                                               New nucleic acid molecules encoding 28 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions
                                                                                               P-PSDB;
                                                                                                                                                                                                       01-NOV-2000; 2000WO-US030045
                                                                                                                                                                                                                               17-MAY-2001
                                                                                                                                                                                                                                                   WO200134626-A1
                                                                                                                                                    (HUMA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1220
                                                                                               2001-308778/32
DB; AAE01469.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                               ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   secreted protein; proliferative disorder; cancer; tumour; abnormality; developmental abnormality; haematopoietic di
                                                                                                                                                    HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAGTGAGGTAAGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAGTGAGGAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGTTCTGGCCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                               Page 449;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19;
                                                                                                                               Komatsoulis
                                                     preventing, d additives
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                    GENOME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein-encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88
                                                                                                                                                                                                                                                                                                                                      /product= "Human s
/transl_except= (I
/transl_except= (I
/transl_except= (I
/transl_except= (I
/note= "Xaa_equals
                                                                                                                                                                                                                                                                                            /*tag= b
247. .1374
                                                                                                                                                                                                                                                                       /*tag= c
/product=
                                                                                                                                                                                                                                                                                                                  -amino
                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                      *tag=
                               562pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                    SCI
                                                                                                                                                                                                                                                                                                                  .246
                                                                                                                                                                                                                                                                                                                       ρα equals α ο acids"
                                                      ç
                                                                                                                               g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2086
                                English
                                                     preservatives.
                                                                                                                                                                                                                                                                          "Mature human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1097
                                                                                                                                Moore
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      쁑
                                                                                                                                                                                                                                                                                                                                      an secreted protein"
= (pos:688. .690, aa:Xaa)
= (pos:1123. .1125, aa:Xaa)
= (pos:1156. .1128, aa:Xaa)
= (pos:1267. .1269, aa:Xaa)
puals any of the twenty natur;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene 4 cDNA clone HWLFR02,
                                                                                                                               PA,
                                                                                                                                Birse
                                                                                                                                                                                                                                                                          secreted protein"
                                                                                                                                Э
                                                                                                                                                                                                                                                                                                                                        twenty naturally
                                                                                                                                 Z.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ
 n secreted
they enco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ID NO:45
                                                                                                                                                                                                                                                                                                                                         ocurring
                                                                 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1219
                                                                                                                                                                                                                                                                                                                                         r
```

AAD05300-AAD05379 represent cDNAs corresponding to protein genes, and AAE01436-AAE01513 represent the

28 human proteins

encode.

```
CC The genes and their secreted protein fragments or variants. CC The genes and their secreted proteins are useful for preventing, treating cor ameliorating medical conditions, e.g., by protein or gene therapy. CC Pathological conditions can be diagnosed by determining the amount of the new genes. Specific uses are described for each of the 28 genes, the new genes. Specific uses are described for each of the 28 genes, CC based on the tissues in which they are most highly expressed, and include disorders, cancer, tumours, foetal and developmental abnormalities, had iscases (e.g., rheumatoid arthritis), inflammation, allergies, consistive disorders, diseases of the immune system, AIDS, autoimmune disorders (e.g., rheumatoid arthritis), inflammation, allergies, conjitive disorders, schizophrenia, asthma, skin disorders (e.g., cognitive disorders, schizophrenia, asthma, skin disorders (e.g., angiogenic disorders, kidney disorders, gastrointestinal disorders, corregnancy-related disorders, antherosclerosis, cardiovascular disorders, corregnancy-related disorders, endocrine disorders, and infections. The proteins can also be used to aid wound healing and epithelial cell corresponding transplantation, for supporting cell culture of primary tissues, to identify their cognate ligands or binding partners, and in chemotexis, and can be used as a food additive or preservative to modify storage properties. Antibodies specific for a corresponding companies and consequence and in diagnostic immunoassays e.g., radioimmunoassays or enzyme linked immunosorbent assay (ELISA). The corresponds a human secreted protein-encoding cDNA of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1090;
                   541
                                                                           646
                                                                                                                                                                                  586
                                                                                                                                                                                                                                                                                           526
                                                                                                                                                                                                                                                                                                                                                                                                  466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             286
                                                                                                                          481
                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCGGATTTGACCTGCACTTTTTGGACAAATCAGGAAGTGTGCTGCACCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                      ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                           CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                  CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CANATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGTGCTCATCTGCGCCCGGGCAAGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                           TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGKTTACTGTGTTGGTGTG
                                                                                                                                                                               ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                           CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           вр;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        544 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1089.4;
Pred. No. 0;
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; 538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        G; 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ς.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,</u>
                      600
                                                                           705
                                                                                                                             540
                                                                                                                                                                                  645
                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                           585
                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                  525
                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
```

ঠ

밁 ş

밁 ş 밁 S 밁 δ

706

AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC

5 밁 Ś

문

á 밁 S 밁 S 밁

밁

```
RESULT 12
ADIO0549
ID ADIO0549
ADIO0549
ADIO064
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO0
AC ADIO
AC ADIO0
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC ADIO
AC A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                           (OKEE/)
(OZKA/)
(HEAL/)
                                                                                                                                                                                                                                                                                                                                                   24-JUL-2002; 2002US-00201292.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      plasmid p0610; ds;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              fusion; von Willebrand factor A-like domain; vWF; antibacterial;
cutaneous; inhalation anthrax; human; TANGO 197 Ig fusion; mutan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human TANGO 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADI00549 standard; DNA; 1674
                                                                                                          Rottman JB, O'keefe
                                                                                                                                                                                                                                                                                               20-DEC-2001; 2001US-00038307
                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2003144193-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1006
                                                      2003-720708/68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                           ) ROTTMAN J B.
) O'KEEFE T L.
) OZKAYNAK E.
) HEALEY J J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGAGTGAGGAAAATAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGTGAGGTAAGTGA 1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGGTTCTGGCCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCATCCTGGCCATCGCCCTGCTGATCCTGKTCCTGCTCCTAGCCCTGGCTCCTCCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TEGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCATCCTGGCCATCGCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ιg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              fusion mutated DNA - plasmid p0610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                          ĮĮ,
                                                                                                          Ozkaynak
                                                                                                          Ħ
                                                                                                             Healey JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1245
```

```
Query Match
Best Local S
Matches 962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel fusion polypeptide comprising a von Willebrand factor A-like domain (vWF) amino acid sequence and an amino acid sequence heterologous to the vWF. The polypeptide of the invention demonstrates antibacterial activities whilst the composition and method may be useful in preventing or ameliorating the symptoms of cutaneous and/or inhalation anthrax. The current sequence is that of the human TANGO 197 Ig mutated fusion DNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New TANGO 197 and/or TANGO 216 fusion polypeptides for preventing or ameliorating symptoms of anthrax comprises a von Willebrand factor A-like domain (vWF) amino acid sequence and an amino acid sequence heterologous to the vWF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                             553
                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                             433
                                                                                                                                                                                                                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 133
                                                                         673
                                                                                                            661
                                                                                                                                                  613
                                                                                                                                                                                     109
                                                                                                                                                                                                                                                                                                      493
                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                   721
733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTACTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGACGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGGCCACGGCGGAGCCGCAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                     GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG 780
                                                                                            ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                    GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                          GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                           AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                              TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                       ACAGCCAGCGTCATCATTGCTTTGACTGATGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CANATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                             AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                               ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                87.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; 461 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             86pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 960.8;
Pred. No. 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.4e-284;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ŧ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ou,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1674;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                720
                                                                                                                                                    672
                                                                                                                                                                                         660
                                                                                                                                                                                                                               612
                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                        552
                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                 492
                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                          432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72
                                                                           732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
```

S В á 밁 δ 밁 र् 밁 ঠ 밁 र् 밁 ş 밁 ş 밁 ঠ 밁 ঠ 밁 ફ 밁 र्

The invention describes a fusion polypeptide comprising a von Willebrand factor A-like domain (vWF) amino acid sequence and an amino acid sequence heterologous to the vWF. Also described are: a method of preventing or ameliorating a symptom of anthrax in a subject thought to be at risk for exposure to or suspected of having been exposed to Bacillus anthracis; and a pharmaceutical composition comprising the novel fusion polypeptide. The composition and method are useful in preventing or ameliorating symptoms of cutaneous and/or inhalation, anthrax. This sequence encodes a fusion protein comprising mouse TANGO197 and immunoglobulin (Ig) that can be used to treat exposure to or prevent a symptom of anthrax.

Example; SEQ ID NO 17; 64pp; English.

Sequence 1674

BP;

433

A 461

ü

424

Ģ 356

ij

Ç

5 밁

밁

```
ADM64575
ID ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX ADM64
XX 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                    ameliorating domain (vWF)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADM64575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADM64575 standard; DNA; 1674
                                                                                                                                                                                                                                                                                                                                                                                                                                                            P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-JUL-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inhalation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antibacterial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-DEC-2001; 2001US-00038307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2003134786-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ROTT/)
                                                                                                                                                                                                                                                                                                                                                                    TANGO 197 and/or TANGO 216 fusion liorating symptoms of anthrax comparain (vWF) amino acid sequence and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ibacterial; gene therapy;
Willebrand factor A-like domain amino acid sequence;
amino acid sequence; anthrax; Bacillus anthracis; cutaneous
amino acid sequence; TANGO197; immunoglobulin; Ig; fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2003-829643/77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TANGO197-immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POTTMAN J B.
O'KEEFE T L.
OZKAYNAK E.
HEALEY J J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'n,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADM64576.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 O'keefe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001US-00038307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Į,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ozkaynak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (Ig)
                                                                                                                                                                                                                                                                                                                                                                    usion polypeptides for preventing or comprises a von Willebrand factor A-like and an amino acid sequence heterologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Healey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           anthrax;
protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             852
```

```
рь
                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                 밁
                                                                                               δ
                                                                                                                                                            δ
                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
片
                        δ
                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 962
                               961
                                                                 913
                                                                                                   901
                                                                                                                                     853
                                                                                                                                                                   841
                                                                                                                                                                                                        793
                                                                                                                                                                                                                                                                          733
                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                           673
                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                             613
                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 133
                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      962;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity 99.0
52; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                   GTGAGAGGAAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGTGCTCATCTGCGCCGGGCAAGGGGAAGACGCAGGGAAGATGGGGGTCCAGCCTGCTAC
                                   TCCA
                                                                                                                                                                                                                        ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                           GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                               ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                               GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAPATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                 964
                                                                                                                                                                                                          CGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     87.0%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     e 960.8; DB 11;
. No. 4.4e-284;
ismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72
                                                                                                   960
                                                                                                                                     912
                                                                                                                                                                      900
                                                                                                                                                                                                          852
                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                             672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 192
                                                                                                                                                                                                                                                                           792
                                                                                                                                                                                                                                                                                                                                             732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                          RESULT 14
AD100545
ID AD100
XX AD100
XX AD100
XX AD100
XX AD100
XX AD100
XX AD100
XX AD100
XX AUTO
CO AD100
XX AUTO
CC May
AD100545
AD1005
AD1005
XX AUTO
PM US200
XX AUTO
PM 24-UI
XX AUTO
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (OKE)
PM (
                                                                                              Ś
                                                                                                                                                             S
                        S
                                                                 밁
                                                                                                                                     밁
                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 956
                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a novel fusion polypeptide comprising a von Willebrand factor A-like domain (vWF) amino acid sequence and an amino acid sequence heterologous to the vWF. The polypeptide of the invention demonstrates antibacterial activities whilst the composition and method may be useful in preventing or ameliorating the symptoms of cutaneous and/or inhalation anthrax. The current sequence is that of the human TANGO 197 Ig FCR mutated fusion DNA of the invention.
                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ROTT/)
(OKEE/)
(OZKA/)
(HEAL/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-JUL-2002; 2002US-00201292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2003144193-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADI00545;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADI00545 standard; DNA; 1650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2003-720708/68.
DB; ADI00546.
                                                                                                     121
                                 181
                                                                   121
 181
                                                                                                                                                                                                                                                                          956;
                                                                                                                                        61
                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ROTTMAN J B.
O'KEEFE T L.
OZKAYNAK E.
HEALEY J J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'n,
                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                      ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                 GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                               CTGGTGCTCATCTGCGCCCGGGCAAGGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                             1650 BP; 427 A; 454 C; 419
                     GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                        CTGGTGCTCATCTGCGCCCGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC
 GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       197
                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0' keefe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001US-00038307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Į
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     entry)
                                                                                                                                                                                                                                                                        86.3%; Score 952.4; DB 10; 99.4%; Pred. No. 1.7e-281; 99.4%; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Į,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mutated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뫈
```

ଜ

350

T; 0 U;

Indels Length 0 Other;

0

180 180 120 120 60 60

```
New TANGO 197 and/or TANGO 216 fusion polypeptides for preventing or ameliorating symptoms of anthrax comprises a von Willebrand factor A-like domain (vWF) amino acid sequence and an amino acid sequence heterologous to the vWF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         fusion; von Willebrand factor A-like domain; vWF; antibacterial; cutaneous; inhalation anthrax; human; TANGO 197 Ig FcR fusion; mplasmid pLKTOK127; ds; gene.
SEQ ID NO 13; 86pp; English
                                                                                                                                                                                                                                                                                                      Ozkaynak E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA -
                                                                                                                                                                                                                                                                                                      Healey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               plasmid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FcR fusion; mutant;
                                                                                                                            A-like
```

```
RESULT 15
ADI00547
ID ADI00
XX ADI00
XX ADI00
XX LUMBAN
XX FUBIC
KW CULBAN
KW PLBBEN
XX PLBBEN
XX PLBBEN
XX PLBBEN
XX PLBBEN
XX PLBBEN
XX PLBBEN
XX PLBBEN
XX PLBBEN
XX PLBBEN
XX PLBBEN
XX PN US20(
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX JLBEN
XX J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                         fusion; von Willebrand factor A-like cutaneous; inhalation anthrax; human; plasmid ptKTOK129; ds; gene.
                         31-JUL-2003
                                                               US2003144193-A1
                                                                                                                                                                                                                                                                  22-APR-2004
                                                                                                                                                                                                                                                                                                                                                  ADI00547 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                              TANGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                      5=5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAATGACGGCTTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANAGATTTCAATGAGACACAGCTGGCCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                            197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              962
                                                                                                                                                                                                                                                                  (first
                                                                                                                                                                                                                          Ιg
                                                                                                                                                                                                                                                                                                                                                  DNA;
                                                                                                                                                                                                                            FCR WT
                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                                    1650
                                                                                                                                                                                                                            fusion DNA -
                                                                                                                                                                                                                                                                                                                                                    ₽P
                                                                                                                                                                human;
                                                                                                                                                              domain; vWF; antibacterial;
; TANGO 197 Ig FcR fusion; w
                                                                                                                                                                                                                          plasmid pLKTOK129
                                                                                                                                                              FcR fusion; wild-type;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                    밁
                                                                                             S
                                                                                                                                             밁
                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽
```

AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC

600 540 540

TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG 421 421 361 361 301 301 241

> ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG CAPATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG

ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT

480 480 420 420 181 181 121 121 13 61 Н

TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG

360

360

300

300

240 180 180 120 120 60

240

GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCGGAAT CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC ATGGCCACGGCGGAGAGCCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT

Conservative

0;

Indels

0

0

ATGGCCACGGCGGAGCCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT

```
Query Match
Best Local Similarity
Matches 956; Conserv
                                                                                                                                                                                                                                  ameliorating domain (vWF) to the vWF.
                                                                                                  The invention relates to a novel fusion polypeptide comprising a von Willebrand factor A-like domain (vWF) amino acid sequence and an amino acid sequence heterologous to the vWF. The polypeptide of the invention demonstrates antibacterial activities whilst the composition and method may be useful in preventing or ameliorating the symptoms of cutaneous and/or inhalation anthrax. The current sequence is that of the human
                                                                                                                                                                                                                                                 New TANGO 197 and/or TANGO 216 fusion polypeptides for preventing or ameliorating symptoms of anthrax comprises a von Willebrand factor A-like domain (vWF) amino acid sequence and an amino acid sequence heterologous
                                                                                                                                                                                                                                                                                                          WPI; 2003-720708/68.
P-PSDB; ADI00548.
                                                                                                                                                                                                                                                                                                                                                                               (ROTT/)
(OKEE/)
(OZKA/)
(HEAL/)
                                                         Sequence 1650 BP;
                                                                                    TANGO 197
                                                                                                                                                                                                       Example; SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-JUL-2002;
                                                                                                                                                                                                                                                                                                                                                                              POTTMAN J B.
O'KEEFE T L.
OZKAYNAK E.
HEALEY J J.
                                                                                                                                                                                                                                                                                                                                                    JB,
                                                                                     Ig FcR wild-type fusion DNA of the invention.
                                                                                                                                                                                                       ID NO 15;
                                                                                                                                                                                                                                                                                                                                                    O'keefe
                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001US-00038307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-00201292
                                                         427 A; 453 C; 419 G; 351 T; 0 U; 0 Other;
             86.3%;
                                                                                                                                                                                                                                                                                                                                                    TL,
                                                                                                                                                                                                     86pp; English
                                                                                                                                                                                                                                                                                                                                                      Ozkaynak
 Score 952.4; DB 10;
Pred. No. 1.7e-281;
0; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                    (M
                                                                                                                                                                                                                                                                                                                                                    Healey
                                                                                                                                                                                                                                                                                                                                                    r.
                              Length
```

Searcl	ర్థ	γQ	皮	Ş	B	Ś	дb	Ş	망	Ş	당	Ś	뮹	Ş	皮
Search completed: December 17, 2005, 19:23:03 Job time : 739.269 secs	961 TC 962	961 TC 962	901 GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACACACA	901 GATGGCCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT 960	841 TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAAC 900	841 TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC 900	781 ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG 840	781 ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG 840	721 GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG 780	721 GTGAGAGGAAACGGCTTCCGACATGCCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG 780	661 ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC 720	661 ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGAGTCATTTCAAGTTGTC 720	601 GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC 660	601 GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGACTCCTGC 660	541 AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC 600

Mon

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                  Database
                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9:
22211111111 987654
                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
949.4
689.2
6684.6
6684.6
668.8
668.8
658.8
637.8
637.8
637.8
531.4
531.4
531.4
480.2
                                                                                                                                                                                            Score
                                                                                                                                                                                                                                                                                                                                                                                                                 eq
eq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ٠
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic search,
                                                                                                                                                                                                                                                                                                                                                                                                                 length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-1_COPY_104_1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     December 18, 2005, 07:01:39; Search time 4989.04 Seconds (without alignments)
10353.271 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                   Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                          41078325 seqs, 23393541228 residues
                                                                                                                                                                                            Match Length
Maximum
Listing
                                                                                                                                                                                                                                                                                                                                                                 EST: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9b_est4: *
9b_est5: *
9b_est6: *
9b_est6: *
9b_gs81: *
9b_gs82: *
9b_gs83: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Copyright
                                                                                                                                                                                                                                                                                                                                                       gb_est1:*
                                                                                                                                                                                                                                                                                                                                       est2:*
est3:*
                                                                                                                                                                                                                                                                                                                               htc:*
                                                                                                                          878
1614
1054
833
                                                                                                                                                           1957
3161
1006
                                                                                                                                                                                                                                                                                                                                                                                 Match
first
        725
7444
963
820
641
780
823
564
877
687
727
522
600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenCore version (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     using
                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                 100%
45 gummaries
       BG326444
BG281561
CF13243
CF126791
BU131302
CD64532
BX364961
CF540285
CA324840
CD664533
CD664531
BG281831
                                                                                                          AK031465
AL542724
BI823853
AK013005
BM800898
CO245219
BE741333
CX872420
                                                                                                                                                                                            Ħ
                                                                                                                                                                            CR601167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mode1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                            82156650
                                                                                                                                                  CR601167 full-leng
AK031465 Mus muscu
AL542724 AL542724
BI823853 603039031
                                                         BE74133
CX872420
BG326444
BG281561
CF132432
CF126791
BU131302
CD664532
        BX364961
CF540285
CA324840
CD664533
CD664531
BG281831
                                                                                                                          AK013005
BM800898
CO245219
                                                                                                                                                                                            Description
Mus muscu
3 AGENCOURT
4 AGENCOURT
5 AGENCOURT
6 01594179
6 01594179
6 02425082
1 00425082
1 01-HF-FQ0
1 01-HF-ET0
2 0311719
2 9254 IMR3
2 9254 IMR3
1 83364961
0 II-M-FQ0-
0 UI-M-FY0-
0 UI-M-FY0-
3 9197 IMR3
3 9197 IMR3
6 9197 IMR3
```

ALIGNMENTS

## REFERENCE AUTHORS TITLE JOURNAL REMARK SOURCE ORGANISM VERSION KEYWORDS RESULT 1 CR601167 LOCUS ORIGIN FEATURES COMMENT REFERENCE ACCESSION DEFINITION Matches 950; Query Match Best Local Similarity JOURNAL TITLE AUTHORS source 1957 bp mRNA linear full-length cDNA clone CSODIO35YAL3 of Placenta Cot of Homo sapiens (human). Web: www.genoscope.cns.fr) 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen. Location/Qualifiers Direct Submission Submitted (20-JUL-2004) Genoscope - Centre National de Sequencage : BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr Contact : Feng Liang Email : fliamonta : f Hominidae; Home. 1 (bases 1 to 1957) Li,W.B., Gruber, C., Jessee, J. and Polayes, D. Full-length cDNA libraries and normalization Unpublished CR601167.1 GI:50481974 HTC; CNSLT\_CDNA. Genoscope. Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homo sapiens Faraday Avenue (bases 1 to 1957) sapiens (human) Conservative /organism="Homo sapiens" /mol\_type="mRNA" /db\_xref="taxon:9606" /clone="CSODIO35YA13" /tissue\_type="Placenta\_Cot\_2" /plasmid="pCMVSPORT\_6" 1. .1957 99.98; Email : fliang@lifetech.com URL Score 949.4; DB 4; Pred. No. 2.6e-270; 0; Mismatches 1; InVitroGen Corporation 1600 25-normalized" Length 1957; Indels HTC 21-JUL-2004 25-normalized 0 Gaps Five prime 0

```
RESULT 2
AK031465
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                             ર્
                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                ર્શ
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
ACCESSION
                                                                              DEFINITION
                                                                                                                                                                                                                                                                                    1035
                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                975
                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                   AKO31465

3161 bp mRNA linear HTC 03-APR-20 mus musculus 13 days embryo male testis CDNA, RIKEN full-length enriched library, clone:6030435P19 product:ANTRAX TOXIN RECEPTOR PRECURSOR (TUMOR ENDOTHELIAL MARKER 8) homolog [Mus musculus], fu
insert sequence.
AK031465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGTGCTCATCTGCGCCGGGCAAGGGGGGCGCAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                             GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACCACACACTGT
                                                                                                                                                                                                                                                                                                         TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                            ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCACGGCGGAGAGCGCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                                                                                                                                                                                                                                    TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                    ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                 HTC 03-APR-2004
                                                                                                                                                                                                                                            951
                                                                                                                                                                                                                                                                                                                                                                    1034
                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                   COMMENT
                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
  source
                                                                                                               Direct Submission

Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GS RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yok Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)

CDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Genomic Sciences Center and Genome Science Laboratory in RIKE Division of Experimental Animal Research in Riken contributed
                                                                                                                                                                                                                                                                                                                                                            Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P. Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W., Hayashida, K., Haytsu, N., Hiramoto, K., Hiraoka, T., Hirozane, T., Hori, F., Imotani, K., Ishii, Y., Itoh, M., Kagawa, I., Kasukawa, T., Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, A., Murata, M., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Ohsato, N., Okazaki, Y., Saito, R., Saitoh, H., Sakai, C., Sakai, K., Sakazume, N., Okazaki, Y., Saito, R., Shibata, K., Shinagawa, A., Shiraki, T., Sogabe, Y., Tagami, M., Tagawa, A., Takahashi, F., Takaku-Akahira, S., Muramatsu, M. and Hayashizaki, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Group Phase I & II leam.
Analysis of the mouse transcriptome of 60,770 full-length cDNAs
There 420, 563-573 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashixo, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer Genome Res. 10 (11), 1757-1771 (2000)
            prepare mouse tissues.
Please visit our web site for further
URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (house mouse)
Mus musculus
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata;
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodent
Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nature 420, 563-573 6 (bases 1 to 3161)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FANTOM Consortium.
Functional annotation
Nature 409, 685-690 (2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Carninci,P. and Hayashizaki,Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The FANTOM Consortium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The RIKEN Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AK031465.1 GI:26082340
HTC; CAP trapper.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11076861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11042159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Exploration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          on of a
(2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Research Group
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RIKEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              based
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                      Research Group in I
Laboratory in RIKE
n Riken contributed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Exploration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Phase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              functional
                                                                                                                                                                                                                                                                                                                          The Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       II Team
                                                                                                                                                                                                                                                                                                           for Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Carninci, P.
                                                                                                                                                                                                                                                                 Yokohama,
                                                                                                                                                                                                                                                                                      (GSC),
                                                                                                                                                                                                                                                                                                                            of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genes
                                                                                                                          ő
```

```
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                     1061
                                                                                                                 1001
                                                                                                                                                                                               941
                                                                                                                                                                                                                                                                                                                                                              821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      341
                                                                         744
                                                                                                                                                       684
                                                                                                                                                                                                                                        624
                                                                                                                                                                                                                                                                                881
                                                                                                                                                                                                                                                                                                                      564
                                                                                                                                                                                                                                                                                                                                                                                                      504
                                                                                                                                                                                                                                                                                                                                                                                                                                            761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  935,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTGGCTCATAGATTCATCAGCCCACAGCTAAGGATGTCCTTCATTGTCTTCTCTACTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GITGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCACCCG 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGGACAAGTCAGGAAGTGTGCTGCACCACTGGAATGAAATCTACTACTTCGTGGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCAT 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCA 83
                                                                                                                                                                                                                                                                                                                                                                                       TCGAGATCTTGGTGCAATTGTTTACTGTGTGTGTGTGAAAGATTTCAATGAGACACAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTCCÁGAAAGTTCTGCCÁGGÁGGAGÁCÁCTTÁCÁTGCACGAAGGATTCGÁGAGGGCCAG 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAACA 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGGGTGCGGGCCTGCGGGACTCTGCGTGCTCGTGCTCGTGTGCGCCGGACA
TGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGA 863
                                                                                                                    ATCCACCATCTGCGCGGGAGAGTCCTTTCAAGTGGTCGTAAGAGGAAATGGCTTCCGACA 1060
                                                                                                                                                     ATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACA 743
                                                                                                                                                                                                    CCAAGGCATTATCCACTCAATTTTAAAGAAATCCTGCATCGAAATTCTGGCGGCTGAACC 1000
                                                                                                                                                                                                                                     GCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACC 683
                                                                                                                                                                                                                                                                                GGCTCGGATTGCAGACAGTAAGGACCACGTGTTTCCTGTGAACGACGGCTTCCAGGCTCT
                                                                                                                                                                                                                                                                                                       GGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                CCGAGACCTTGGTGCGATTGTTTACTGCGTTGGCGTGAAGGATTTCAATGAAACTCAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                            GACGGATGGGGAGCTGCACGAGGACCTCTTCTTCTACTCAGAGAGGGGAGGCTAACCGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAGCAGATTTACTATGAGAÁCAGTCAÁGGATACAGGACGGCGAGCGTCATCATCGCGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGGACAACTTTAATGAAACTAACTGAGGACAGGGAACAGATCCGACAAGGCCTAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGAACAACCTTAATGAAACTGACAGAGAGAAGAACAAATCCGTCAAGGCCTAGAAGA 323
                                     TGCCCGCAATGTGGACAGGGTCCTCTGCAGCTTCAAAATCAATGACTCAGTCACGCTCAA 1120
                                                             TGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAA 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="ANTRAX TOXIN RECEPTOR PRECURSOR (TUMOR ENDOTHELIAL MARKER 8) homolog [Mus musculus] (SWISSPROT|Q9CZ52, evidence: FASTY, 100%ID, 84.6%length, match=1428)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="mRNA"
|ftrain="C5HL/6J"
|db_xref="FANTOM_DB:6030436P19"
|db_xref="taxon:I0090"
|clone="6030436P19"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue type="testis"
/clone_Tib="RIKEN full-length
/dev_stge="13 days embryo"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          77.3%;
87.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 853.4; DB 4;
Pred. No. 1.2e-241;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches 136;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             enriched
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            760
                                                                                                                                                                                                                                                                                                                        623
                                                                                                                                                                                                                                                                                                                                                                  880
                                                                                                                                                                                                                                                                                                                                                                                                        563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          520
                                                                                                                                                                                                                                                                                  940
                                                                                                                                                                                                                                                                                                                                                                                                                                                820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

र् В ş

밁 δ 밁

ঠ

804

5 В S 밁 á 밁 र् 밁 Ś 문 S 밁 Ś 밁 Ś 밁 Ś 밁 á

В

```
RESULT 3
AL542724
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
밁
                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                              Matches
                                                                                               Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1241
                                                                            703;
  293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AL542724
AL542724 Homo
5-PRIME, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                   division of Invitrogen.
This sequence belongs to sequence cluster 1660.f
For more information about this cluster, see
http://www.genoscope.cns.fr/cdna?s=CSODEO11CF05QP1&c=1660.f.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
18t strand cDNA was primed with a NotI-Oligo(dT) primer. Five prime
18t strand cDNA was primed with a NotI-Oligo(dT) primer. Five prime
end enriched, double-strand cDNA was digested with Not I and cloned
into the Not I and EcoRV sites of the pCMVSPORT 6 vector. Library
was not normalized. Library was constructed by Life Technologies, a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            On Feb 15, 2001 this sequence version replaced Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 1006)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AL542724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AL542724.3
                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTGATCAAGGAGGTCCCTCCACCCCCTGTTGAGGAGAGTGAGGAAGA 1411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTGCTGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTTGGCATGAAAGCTGCACTGCAGGTCAGCATGAACGACGGCCTGTCCTTCATCTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAGAAGCCCTTTGCTGTGGAAGACACTTATTTGCTGTGCCCAGCACCAATCTTGAAAGA
                                    ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCTGTCATCATCACCACACACACTGTTCAGACGGCTCCATCCTGGCGATTGCTCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                                              /tissue type="PLACENTA"
/clone Tib="Homo sapiens PLACENTA"
/clone Tib="Homo sapiens PLACENTA"
/note="Vector: pCMVSPORT 6; lst strand cDNA was primed with a NotI-cligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned ithe Not I and ECORV sites of the pCMVSPORT 6 vector. Library was not normalized."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens PLACENTA
                                                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                             clone="CS0DE011YL09"
                                                                                                                                                                                                                                                                                                                                                                                       organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GI:45718299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence
                                                                                                  62.4%;
99.0%;
                                                                            Score 689.2; DB 1;
Pred. No. 5.2e-193;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              đđ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA 1
o sapiens
                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cDNA clone CS0DE011YL09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gi:30548161.
                                                                              <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               983
    352
```

S

```
RESULT 4
BI823853
LOCUS
                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                 Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                         Hominidae; Homo.

1 (bases 1 to 878)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian
               found through the I.M.A.G.E. Consortium/LLNL http://image.llnl.gov Plate: LLAM11448 row: n column: 07
                                                                                                                                                                                                                                                                                                                                                                                                                                  603039031F1 NIH_MGC_115
                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                Unpublished (1999
                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                      mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGCCAGCGTCATCGTTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATT
|||||||||||||
ATCGAAATTCTAGCA--CTGAACATCCAMCATATGTGCAGGAGAGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCGGATTTGACCTGCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGATGGGGGTCCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
quality sequence stop: 804.
                                                                                                                                                                                                                                                                                                                                                                                  GI:15935416
                                                                                                                                                                                                                                                                                        Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                       878
Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                     bр mR
варіепв
                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                         cDNA clone
                                                                                                                                                                                                                  Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                       linear EST 04-OCT-2001
clone IMAGE:5179974 5',
                                                                                                                                                                                                                    Collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   710
                                                                                                                                                                                                                    (MGC)
                                                                       þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         772
                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                   묽
                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                밁
                                                            Ş
                                                                                                         밁
                                                                                                                                         Ś
                                                                                                                                                                                 밁
                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                      片
                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Sim
Matches 783;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                        537
                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                477
                                                                                                                                                                                                                                                                                                                                                                                                     417
                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     117
                                                                                                           656
                                                                                                                                             601
                                                                                                                                                                                 596
                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
718
                                   716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           57
                                                                                                                                                                                                                                                                                                                                                                                                                          CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                   GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTG-AAGAAGTCCTG
                                                                                                                                                                                                     AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGTGCTCATCTGCGCCGGGCAAGGGGAGGAAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGCCACGGCGGAGGCGCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
GTCGTGAGAGG---AAACGGCTTCCGACATGCCCG---CAACGTGGACAGGG--
                                                            CATC-GAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTC-ATTTCAAGTT
                                                                                                         GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAAGAAGTCCTG
                                                                                                                                                                                 AAAGATTTTCAATGAGACACAGCTGGCCCGGGATTGCCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                        TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTT-GTGTG
                                                                                                                                                                                                                                                                           TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                              ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                  ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                     CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone lib="NIH MGC 115"
//clone lib="NIH MGC 115"
/note="Organ: pooled brain, lung, testis; Vector:
/note="Organ: pooled brain, lung, testis; Vector:
pCMV-SPORT6; Site 1: NotI; Site_2: ECORV (destroyed); RNA
source anonymous pool of 6 male brains, age range 23-27; 1
male lung, age 27; and 1 male testis, age 69. Library is
oligo-dT primed and directionally cloned (ECORV site is
destroyed upon cloning). Average insert size 1.8 kb,
insert size range 1-3 kb. Library is normalized and
enriched for full-length clones and was constructed by C.
Gruber (Invitrogen). Research Genetics tracking code
021. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone="IMAGE:5179974"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62.0%;
95.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 684.6; DB 3;
Pred. No. 1.2e-191;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11;
     -TCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                        595
                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6
                                         775
                                                                                                           715
                                                                                                                                               659
                                                                                                                                                                                  655
                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                         476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
```

ঠ

В δ 밁

밁 ঠ В

밁 S Ş 밁 밁 Ś 밁 S 밁 Ş 밁 Ş 8

र्

```
TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 5
AK013005
                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                          L Nature 420, 563-573 (2002)

E 6 (bases 1 to 1614)

Adachi, J., Aizawa, K., Akahira, S., Akimura, T., Arai, A., Aono, H., S., Adachi, J., Aizawa, K., Akahira, P., Fukuda, S., Fukunishi, Y., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Fukunishi, Y., Furuno, M., Hanagaki, T., Hara, A., Hayatsu, N., Hiramoto, K., Furuno, M., Hori, F., Imotani, K., Ishii, Y., Itoh, M., Izawa, M., Kasukawa, T., Kato, H., Kawai, J., Kojima, Y., Konno, H., Kouda, M., Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, A., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Okazaki, Y., Okido, T., Owa, C., Salto, H., Saito, R., Sakai, C., Sakai, K., Sano, H., Sasaki, D., Shibata, K., Shibata, Y., Shibata, K., Shibata, K., Shibata, K., Tagawa, A., Shiraki, T., Sogabe, Y., Suzuki, H., Tagami, M., Tagawa, A., Takahashi, F., Tanaka, T., Tejima, Y., Toya, T., Yasunishi, A., Yoshida, K., Tagami, M., Tagawa, A., Takahashi, P., Tanaka, T., Tagawa, A., Takahashi, P., Tanaka, T., Tagawa, A., Takahashi, P., Tanaka, T., Tagawa, A., Tagawa, A., Yasunishi, A., Yoshida, K., Tagawa, A., Takahashi, P., Tanaka, T., Tagawa, A., Takahashi, P., Tanaka, T., Tagawa, A., Tagawa, A., Yasunishi, A., Yoshida, K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitcunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramateu, M., Inoue, Y., Kira, A., and Hayashizaki, Y. RIKEN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer Genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AK013005
AK013005.1 GI:12850099
HTC; CAP trapper.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AK013005

1614 bp mRNA linear HTC 03-APR-2004 Mus musculus 10, 11 days embryo whole body cDNA, RIKEN full-length enriched library, clone:2810405N18 product:ANTRAX TOXIN RECEPTOR PRECURSOR (TUMOR ENDOTHELIAL MARKER 8) homolog [Mus musculus], full
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Carninci,P. and Hayashizaki,Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MuB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mue
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Group Phase I & II Team.
Analysis of the mouse transcriptome of 60,770 full-length CDNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The FANTOM Consortium and the RIKEN Genome Exploration Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Functional annotation of a full-length mouse cDNA collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The RIKEN Genome Exploration Research Group Phase II Team and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
  Submitted (10-JUL-2000) Yoshihide Hayashizaki,
                          Yoshino, M., Muramatsu, M. and Hayashizaki, Y. Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FANTOM Consortium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        insert sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11042159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11076861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGTTTCCAGATCATGACTTCGGTCACACTTCAATGAAAAGCC 878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCC 813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          685-690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            based
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            functional annotation
     The
     Institute
                                                                                                                                                                                                                                                        Kouda, M.,
                                                                                                                                                                                                                                                                                                                                                                         Aono, H.
                                                                                                                                                                                                      Owa, C.,
        of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                        밁
                                                                                                                გ
                                                                                                                                                                              밁
                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                 122
                                                                                                                                                                                                                                       328
           448
                                                                                                                      388
                                                                                                                                                                                 62
                                                                                                                                                                                                                                                                                            N
           GATGGAGAACTCCATGAAGATCTCTTTTCTATTCAGAGAGGGGAGGCTAATAGGTCTCGA
```

```
polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Exploration Research Group, RIKEN Genomic Sciences Center RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Kanagawa 230-0045, Japan (E-mail:genome-cse@gsc.riken.jp, URL:http://genome-gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Host: SOLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cDNA library was prepared and sequenced in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Please visit our web site (http://genome.gsc.riken.jp/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Physical and Chemical Research (RIKEN), Laboratory for Genome
                                                                                                                                                                                                                                                                                                                                Similarity
                                                                   CAGATTTATGAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACT 447
                                                                                                                                                   CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAG
                                                                                                                                                                                                                                              ACAACCTTAATGAAACTGACAGAAGAACAAAACAAATCCGTCAAGGCCTAGAAGAACTC 327
                                     CAGATTTACTATGAGAACAGTCAAGGATACAGGACGGCGAGCGTCATCATCGCGTTGACG
                                                                                                                           CAGAAAGTTCTGCCAGGAGAGACACTTACATGCACGAAGGATTCGAGAGGGCCAGTGAG
                                                                                                                                                                                                                  ACAACTTTAATGAAACTAACTGAGGACAGGGAACAGATCCGACAAGGCCTAGAAGAGCTC
                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /translation="mkltedreqirqgleelqkvlpggdtymhegferaseqiryens qqyryasviialtogelhedlfyysereanseqilaticalivycygvkdfmetqlariads kdhvrpvmdgrqlqgiihsilkkgcieilelaresticagesfqvvvkgmgferhand drulcsfkindsvtlmekrfavedtyllcereilkevgmkalqvsmbdglsfissvtitthekgkiikkevgmkalqvsmbdlsfisssviitthkcspsilaiallvlflllalallmwfwplcctviikevppppveeseeeddd glpkkkmytvdasyyggrgvggikmevrwgekgstegaklekakakarvkmpeqeye
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="unnamed protein product; ANTRAX PRECURSOR (TUMOR ENDOTHELIAL MARKER 8) musculus] (SWISSPROT [09CZ52, evidence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FPEPRNLNNNMRRPSSPRKWYSPIKGKLDALWVLLRKGYDRVSVMRPQPGDTRFRGWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                84.6%length, match=1428)
putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="putative"
1614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LTICLGSKHVHPGRHDKGPETPLLKQAWMFSSFLERAFQ'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /codon_start=1
/protein_id="BAB28591.1"
/db_xref="GI:12850100"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /dev_stage="10, 11. .1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue_type="whole body"
/clone_Tib="RIKEN full-length enriched mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                    /note="putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    clone="2810405N18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              db_xref="FANTOM_DB:2810405N18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                61.7%;
89.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           _type="mRNA"
                                                                                                                                                                                                                                                                                                           °,
                                                                                                                                                                                                                                                                                                                                Score 681.4; DB 4;
Pred. No. 1.3e-190;
                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11 days embryo"
                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                       Length 1614;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOXIN RECEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            homolog [Mus
FASTY, 100%ID
                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for
                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Yokohama,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GSC),
507
                                                                                                                                                                          387
                                                                                                                                                                                                                       61
                                                                                                                                121
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
BM800898
                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
FEATURES
                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                         Locus
                                                                                                                                                                                                                                                                                                                                              /ERSION
                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     782
                         Contact: Robert Strausberg, Ph.D.

Email: cgapbe-r@mail.nih.gov

Tissue Procurement: ATCC/DCTD/DTP

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM12238 row: j column: 13
                                                                                                                                                                                                                                                                                                                                                                1054
AGENCOURT 6420797 NIH MGC 72
5', mRNA sequence.
BMRODROG
                                                                                                                                                                                    NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                              BM800898.1 GI:19117721
EST.
                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                  Hominidae, Homo.
1 (bases 1 to 1054)
                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAGCTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTTGGCCATCGCCCTGCTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACCTTGGTGCGATTGTTTACTGCGTTGGCGTGAAGGATTTCAATGAAACTCAGTTGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCATCAAGGAGGTCCCTCCACCCCCTGTTGAGGAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTGCTGCACTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCATCATCACCACCACACACTGTTCAGACGGCTCCATCCTGGCGATTGCTCTGCTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCATGAAAGCTGCACTGCAGGTCAGCATGAACGACGGCCTGTCCTTCATCTCCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCCCTTTGCTGTGGAAGACACTTATTTGCTGTGCCCAGCACCAATCTTGAAAGAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCAATGTGGACAGGGTCCTCTGCAGCTTCAAAATCAATGACTCAGTCACGCTCAATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCATCTGCGCGGGAGAGTCCTTTCAAGTGGTCGTAAGAGGAAATGGCTTCCGACATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCATTATCCACTCAATTTTAAAGAAATCCTGCATCGAAATTCTGGCGGCTGAACCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGGATTGCAGACAGTAAGGACCACGTGTTTCCTGTGAACGACGGCTTCCAGGCTCTCCAA
quality sequence stop: 595.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                              (human)
                                                                                                                                                                                                                                                                                                                                                                                        bp
Homo
                                                                                                                                                                                                                                                                                                                                                                                        mRNA linear EST 05-MAR-2002
sapiens cDNA clone IMAGE:5541228
                                                                                                                                                                                                     Gene
                                                                                                                                                                                                     Collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     828
                                                                             þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         747
 RESULT 7
CO245219
                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                        S
                                                                                                                          밁
                                                                                                                                                   S
                                                                                                                                                                                    밁
                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                             517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          277
                                                              816
                                                                                                                                                                                       697
                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                  637
                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                      457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   157
                                                                                           719
                                                                                                                          756
                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            704;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                           ATCGAAATTCTAGCAGCTGAACCATCCACCAT-ATGTGCA-GGAGAGTCATTTCAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGTGCTCATCTGCGCCGGGCAAGGGGGGACGCAGGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCACGGCGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                              ä
                                                                                             TC 720
                                                                                                                           ATCGAAATTCTAGCGGGTTGAACATCCCCCCATGATGTGCAGGGAGAGACATTTCCAGGTG
                                                                                                                                                                                       GTGAATGACGGCTTTCAGGCTCTGC-AGGGATCATCCACTCCAGTTTTAAGAAGTCCTGC
                                                                                                                                                                                                        GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                    ANAGATTTCANTGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGGTTCCC
                                                                                                                                                                                                                                                                    AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                               TCAGAGAGGGAGGCTAATAAGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                 TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                        ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                              817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue type="melanotic melanoma"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NIH MGC 72"
/note="Organ: skin; Vector: pCMV-SPORT6; Site_1:
Site_2: Sall; Cloned unidirectionally. Primer: C
Average insert size 2 kb. Library constructed b
Technologies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .1054
/organism="Homo sapie
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clone="IMAGE:5541228"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 662; DB 3;
Pred. No. 6.6e-185;
0; Mismatches 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1054;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1: NotI;
: Oligo dT.
d by Life
                                                                                                                                                                                                                                                                                                               636
                                                                                                                                                                                                                                                                                                                                                                                                                                          516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                156
                                                                                                                             815
                                                                                                                                                                                       755
                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                    696
                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
```

399

420 459

519

540

639

579

600

699

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
                                                                                                          १
                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                        밁
                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 RmiDA07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Mary Hendrix
CDNA Library Preparation: M. Bento Soares, University of Iowa
cDNA Library Preparation: M. Bento Soares, University of Iowa
cDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.B. Consortium/LLNL at:
http://image.llnl.gov
plate: NDAM1166 row: j column: 11
High quality sequence start: 6
High quality sequence start: 6
High quality sequence stop: 688.
Location/Qualifiers
                                                                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                                                                                                                                                      100
                                                                                                                181
                                                                                                                                                                        220
                                                                                                                                                                                                                             121
     241
                                                        280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    689;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGENCOURT 26524177 NIH MGC 212 Homo sapiens cDNA clone IMAGE:30974322 5', mRNA sequence. CO245219 CO245219.1 GI:49108057
                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ,..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hominidae; Homo.

1 (bases 1 to 833)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian

Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                          GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT 180
                                                                                                                                                                                                                                                                                                                                                 CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT 60
  TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAGACAGAGAA 300
                                                              GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                              GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                            CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC 219
                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT 159
                                                                                                                                                                           ĠĠĊĠĠĂŦŦŤĠĂĊĊŦĠŦĂĊŦŦĊĂŤŦŦŦĠĠĂĊĂĂAŦĊAĠĠAĀĠŦĠŦĠĊŦĠĊAĊĊĠĊAĊĊĠĠĀĀŦ 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tissue type="Chondrosarcoma Lung Metastasis cell lines"
/lab_host="DH108 (T1 phage resistant)"
/clone lib="NIH MGC_212"
/clone lib="NIH MGC_212"
/clone Tib="NIH MGC_212"
/clone lib="NIH MGC_212"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  clone="IMAGE:30924322"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              59.7%;
97.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 658.8; DB 7;
Pred. No. 5.4e-184;
D; Mismatches 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear EST 23-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ų.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                      240
                                                              339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
BE741333
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hominidae; Homo.

1 (bases 1 to 725)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian

Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          вы/41/33
601594179F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                         CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov
Plate: LLCM810 row: n column: 19
High quality sequence stop: 711.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BE741333.1 GI:10155325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGA 704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAPATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCGAAA-TCTAGCAGCTGAAC--ATCCACATATGTGCAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCCACTCATTTTGAAGAAAGTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
     /tissue_type="adenocarcinoma cell line"
/lab host="DHIOB (phage-resistant)"
/lab host="DHIOB (phage-resistant)"
/clone_libe="NIH MGC_9"
/note="Organ: ovary; Vector: pOTB7; Site_1: XhoI; Site_2:
fcoRI; cDNA made by oligo-dT priming. Directionally
cloned into EcoRI/XhoI sites using the following 5'
adaptor: GGCACGAG(G). Size-selected >500bp for average
insert size 1.8kb. Library constructed by Ling Hong in
                                                                                                                                                                                                                                   /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:3948114"
                                                                                                                                                                                                                                                                                                                      organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EST 15-SEP-2000
```

```
REFERENCE
AUTHORS
                                                                                                                                                                      RESULT 9
CX872420
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                        DEFINITION
                                                                                                  KEYWORDS
                                                                                                                  VERSION
                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 653
                                                                                                                                                                                                                                                                 951
                                                                                                                                                                                                                                                                                            109
                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                           832
                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         292 GACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGAC
                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                      891
                                                                                                                                                                                                                                                                                                                                                                                                                               772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ь
Hominidae; Homo.
1 (bases 1 to 744)
NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                            CX872420 744 bp
HESC4 68 H01.g1 A037 NIH MGC_262
IMAGE:7487092 5', mRNA sequence.
CX872420
                                                                                                    CX872420.1 GI:58555594
EST.
                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                        Homo sapiens
                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                  T 951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGAC
                                                                                                                                                                                                                                         н.
                                                                                                                                                                                                                                                                                                                                                 TATTTACTGTGTCCAGCGCCTATCTTAACAAGAAGTTGGCATGAAAGCTGCACTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAGTTGTCGTGAGAGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAA
                                                                                                                                                                                                                                                                                             CAGCATGAACGATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCAGCAACACTTG
                                                                                                                                                                                                                                                                                                           CAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCATCACCACCACACACTG
                                                                                                                                                                                                                                                                                                                                                                 TATTTACTGTGTCCAGCGCCTATCTTAA-AAGAAGTTGGCATGAAAGCTGCACTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                     AGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACT
                                                                                                                                                                                                                                                                                                                                                                                                                      AGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTTGGTGTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTGGTGTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTTTCTATTCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTTTCTATTCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            57.8%;
98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 637.8; DB Pred. No. 9e-178; O; Mismatches
                                                                                                                                                        Homo sapiens cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۲
۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Technologies)."
                                                                                                                                                                     EST 03-FEB-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                      950
                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                            890
                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                831
                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
COMMENT
                                                                                    á
                                                                                                                                          S
                                                                                                                                                                                             Ś
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                 Ś
                          S
                                                           밁
                                                                                                                  밁
                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                밁
        밁
                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                            371
                                                                                                                  311
        431
                                301
                                                                                       241
                                                                                                                                                                        251
                                                                                                                                                                                                                            191
                                                                                                                                                                                                                                                                                131
                                                                                                                                             181
                                                                                                                                                                                                121
                                                                                                                                                                                                                                                     61
```

```
Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ATGGCCACGGCGAGCCGGAGAGCCCTCGGCATCGGCTTCCCAGTGGCCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cDNA Library Preparation: Express Genomics, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Laboratory for Genomics and Bioinformatics,
University of Georgia
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: cgapbs-r@mail.nih.gov
Tissue Procurement: BresaGen, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics National Cancer Institute / NIH Bldg. 31 Rm10A07 Bethesda, MD 2088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seq primer: JENREV (CAGGAAACAGCTATGACC)
High quality sequence stop: 744.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Plate: LLAM15815
                                                                                                                                                                                                                                          GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                         GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGTGCTCATCTGCGCCGGGCAAGGGGGAGGACGCAGGGAGGATGGGGGTCCCAGCCTGCTAC
                               TCCTTTATTGTTTTCTCCACCCGAGGAACCAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                 GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
CANATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGAGACACTTACATG
                                                                                                                   TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="embryonic stem"
/cell type="human embryonic stem cells"
/cell line="BG01"
/lab host="DH10B-T1 phage-resistant E. coli"
/clone lib="NIH MGC 262"
/note="Vector: pExpress-1; Site 1: Not1; Site 2: EcoRV;
RNA obtained from human embryonic stem cells Isolated from the inner cell mass of blastocyst stage embryos and differentiated to an early neural progenitor cell type.
Cell line id and NIH Registry designation is BG01.
Positive for Nestin and Musashi expression. Passage number 18. cDNA primed using oligo-dT primer:
5'-pGACTAGTTCTAGATCGCAGGCGCCCC(T)25-3' and cloned into the EcoRV/NotI sites of pExpress-1. This primary library is non-normalized (normalized primary library is non-normalized (normalized primary library is non-normalized (normalized primary library is non-normalized constructed by Express Genomics (Frederick, MD). Sequence ends have been trimmed to exclude vector and regions below Phred quality 16. Note:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            this is a Mammalian Gene Collection library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone="IMAGE:7487092"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   55...
100.0%; F1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            55.6%; Score 614; DB 8; Ion 100.0%; Pred. No. 1.1e-170; ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                row: p column:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MD 20892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 744;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                           360
                                                                                                                      430
                                                                                                                                                                               300
                                                                                                                                                                                                                                             370
                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                 310
                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
      490
```

```
RESULT 10
BG326444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                  Query Match
Best Local Similarity
Matches 621; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG326444 963 bp r 602425082F1 NIH_MGC_14 Homo Bapiens mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BG326444
BG326444.1 GI:13132881
EST.
                                                                                                                                                                                                                                                                                                                                                                                           found through the I.M.A.G.E. Consortium/LLNL http://image.llnl.gov
Plate: LLCM1276 row: c column: 21
High quality sequence stop: 718.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hominidae; Homo.
1 (bases 1 to 963)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAATGACGGCTT 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGAAGGATTTGAAAAGGGCCAGTGAGCAGATTTATTATTGAAAAACAGACAAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAATGACGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens (human)
                    Conservative
                                                                                                    /clone="IMAGE:4563020"
/tlssue_type="renal cell adenocarcinoma"
/tlssue_type="renal cell adenocarcinoma"
/lab_host="DH10B (phage-resistant)"
/clone lib="NIH MGC 14"
/clone lib="NIH MGC 14"
/note="Organ: kidney; Vector: pOTB7; Site_1: XhoI; Site_2:
ECORI; CDNA made by oligo-dT priming. Directionally
cloned into ECORI/XhoI sites using the following 5;
adaptor: GGCACGAG(G). Size-selected >500bp for average
insert size 1.8kb. Library constructed by Ling Hong in
the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZAP-cDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                   53.0%;
                  Score 585; DB 2; 1 pred. No. 5.2e-162; 0; Mismatches 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cDNA clone IMAGE: 4563020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gene
                                                    Length 963;
                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EST 27-FEB-2001
                    4.
                    Gaps
                                                                                                                                                                                                                                 Site_2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ğ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ű
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   550
                    2
                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 11
BG281561
                                                                                                                                                                                  JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
     FEATURES
                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               174 CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1
Email: cgapbs-remail.nih.gov
Tissue Procurement: ATCC/DCTD/DTP
CDNA Library Preparation: Ling Hong/Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can |
found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.g
plate: LLCM1228 row: h column: 04
High quality sequence stop: 815.
Location/Qualifiers
                                                                                                                                                                                               Hominidae; Homo.

1 (bases 1 to 820)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian

Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                              BG281561 01H_MGC_20 Homo
                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                BG281561
BG281561.1
                                                                                                                                                                                Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                 mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAATGACGG--TTTAAGATCTGGAAGGCATCATCCATTCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGAAGGATTCGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAPATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCACGGCGGAGCGGCAGCCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCACGGCGGAGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAAGATCTCATGAGACAAGTTTGGCC--GGATGCGGACAGTAAGGATCATGTGTATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                  GI:13030486
                                                                                                                                                                                                                                                                                        Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       820
                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                       đđ
                                                                                                                                                                                                                                                                                                                                                                                                                                        cDNA clone IMAGE: 4544691
                                                                                                                                                                                                                     Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                       Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 645
                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST 21-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                         ű
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   233
```

```
S
                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                            र्
                                                                                                                                    밁
                                                                                                                                                                   S
                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
밁
                           δ
                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                   595
                                                                                                                                      652
                                                                                                                                                                       537
                                                                                                                                                                                                         592
                                                                                                                                                                                                                                          477
                                                                                                                                                                                                                                                                              532
                                                                                                                                                                                                                                                                                                               417
                                                                                                                                                                                                                                                                                                                                                   472
                                                                                                                                                                                                                                                                                                                                                                                    358
                                                                                                                                                                                                                                                                                                                                                                                                                      412
                                                                                                                                                                                                                                                                                                                                                                                                                                                         298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        172
                                655
                                                                   712
770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             683;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCGGATTTGACCTGTACTTCATTTTGGACAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                CAGGACAGCCAGCGTCATCATTGCTTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTT
                                                                                                                                                                                                                                                                                                                                                                     ATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATT-ATGAAAAACAGACAAGGGTA 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCCTTATATGTGTTTTCTCCACCCGAGGAACAAGCTTAATGAAACTGACAGAAGACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAATCTATTACTTTGTGGAACAGTT-GGCTCACAAATTCATCAGCCCACAGTTGAGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                           TCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAG
                                                                                              TTTCCCCTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAG
                                                                                                                                                                                                                                             CTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                      GAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                            GAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGGACACTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTCCT--TTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAATCTATTACTTTGTGGAACAGTTGGGTTCACAATTTCATCAGCCCACAGTTGAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
 TCCTGCCTCGAAATTCTAGCAGCTGAACCATACA-CATATGTGCAGGACAG 819
                                                                                                                                                                          TGTGAA-AGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGT-AAGGATCATGTG
                                                                                                                                                                                                                                                                              CAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTGG
                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /tissue_type="melanotic melanoma"
/lab host="DH108 (phage-resistant)"
/clone_lib="NH108 (phage-resistant)"
/clone_lib="NH108 (phage-resistant)"
/clone_lib="NH MGC_20"
/note="Organ: skin; Vector: pOTB7; Site_1: XhoI; Site_2:
ECORI; cDNA made by oligo-dT prinning. Directionally
cloned into ECORI/XhoI sites using the following 5;
adaptor: GCCACGAG(G). Size-selected >500bp for average
insert size 1.8kb. Library constructed by Ling Hong in
the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZAP-cDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4544691"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52.8%;
96.1%;
                                                                    TTTCAGGCTCTGC-AGGCATCATCCATCAAATCTTGACGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 582.6; DB 2;
Pred. No. 2.5e-161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               820;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            171
                                                                                                                                                                          594
                                                                                                                                                                                                             651
                                                                                                                                                                                                                                            536
                                                                                                                                                                                                                                                                              591
                                                                                                                                                                                                                                                                                                                                                                                                                        471
                                                                                                                                                                                                                                                                                                                                                                                                                                                         357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                       654
                                                                                                                                        711
```

RESULT 12 CF132432

```
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                               5
                                                                                           문
                                                                                                                                        Ś
                                                                                                                                                                                               밁
                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                 139
                                                                                                                                                                                                                                                19
                                                                                                                                                                                                                                                                                                     79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CF132432

G41 bp mRNA linear EST 05-AUG-
UI-HF-FQ0-awo-m-16-0-UI.r1 NIH_MGC_215 Homo sapiens cDNA clone
IMAGE:30560079 5', mRNA sequence.

CF132432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: bento-soares@uiowa.edu
Tissue Procurement: Mary Hendrix
cDNA Library preparation: Dr. M. Bento Soares, University of Iowa
cDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
cDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Distribution information can be found at
http://genome.uiowa.edu/distribution/humanfl.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hominidae; Homo.
1 (bases 1 to 641)
Bonaldo, M.F., Lenno.
                                                                                                                                                                                                                                                                                                                                                 1 ATGCCCACGCGGAGCCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         University of Iowa
375 Newton Road , 4156
Tel: 319 335 8250
Fax: 319 335 9565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Coordinated Laboratory for Computational Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Soares,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8889548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Normalization and subtraction: two
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CF132432.1 GI:33215693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seq primer: pYX-5.
GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                       GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                          GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCGGAAT
                                                                                                                                                                                                                                      CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                  ATGGCCACGGCGAGCGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /tissue_type="Chondrosarcoma Lung Metastasis cell lines"
/lab host="DH108 (TI phage resistant)"
/clone_lib="NH108 (TI phage resistant)
/clone_Torgan: Lung; Vector: pyx-Asc; Site_1: EcoR I;
/clone_Torgan: Lung; Vector: pyx-Asc was constructed according
Bonaldo, Lennon and Soares, Genome Research, 6:791-806,
1996. Denatured RNA was size fractionated on a 1% agarose
gel. First strand cDNA synthesis was primed with Oligo-dT
primer containing a Not I site. Double strand cDNA was
size selected according to mRNA size fraction, ligated
with EcoR I adaptor, digested with Not I and then cloned
directionally into pyx-Asc vector. The library tag
sequence located between the Not I site and the polyA tail
is GATAAGGCCA. Tissue was provided by Mary Hendrix."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:30560079"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                          50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lennon, G. and Soares, M.
                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                          Score 552; DB 6;
Pred. No. 2.9e-152;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEBRF, Iowa City,
                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  approaches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 641;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IA 52242,
                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       facilitate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EST 05-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                     138
                                                                                                                                                                                                                                                                                                                                                      60
                                                 240
                                                                                                258
                                                                                                                                                     180
                                                                                                                                                                                                      198
                                                                                                                                                                                                                                                   120
  318
```

```
RESULT 13
CF126791
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IMAGE:30560510 5', mRNA
CF126791
CF126791.1 GI:33204381
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CF126791 780 bp mRNA linear UI-HF-ETO-avv-o-15-0-UI.rl NIH_MGC_214 Homo sapiens IMAGE:30560510 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                          Coordinated Laboratory for Computational Genomics University of Iowa 375 Newton Road, 4156 MEBRF, Iowa City, IA 5224: Tel: 319 335 8250 Fax: 319 335 9565
                                                                                                                                                                                                                                                Email: bento-soares@uiowa.edu
Tissue Procurement: Mary Hendrix
CDNA Library preparation: Dr. M. Bento Soares, University of
CDNA Library Arrayed by: Dr. M. Bento Soares, University of
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Distribution information can be found a
http://genome.uiowa.edu/distribution/humanfl.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 780)
Bonaldo, M.F., Lennon, G. and Soares, M.B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Soares, MB
                                                                                                                                                                                                                                                                                                                                                                                                                                                             8889548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Normalization and subtraction: two
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAPATICCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGATTTCAATGAGACACAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGA-TTCAATGAGACACAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                      primer: pYX-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens (human)
/tissue_type="Chondrosarcoma Lung Metastasis cell lines"
/lab_host="PH10B (T1 phage resistant)"
/clone_lib="NIH_MGC_214"
/clone_lib="NIH_MGC_214"
/note="Organ: Lung; Vector: pYX-Asc; Site 1: EcoR I;
/note="Organ: Lung; Vector: pYX-Asc; Site 1: BcoR I;
/site 2: Not I; The library was constructed according
Bonaldo, Lennon and Soares, Genome Research, 6:791-806,
1996. Denatured RNA was size fractionated on a 11% agarose
gel. First strand cDNA synthesis was primed with oligo-dT
primer containing a Not I site. Double strand cDNA was
                                                                                                                                            /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:30560510"
                                                                                                                                                                                         organism="Homo sapiens"
                                                                                                                                                                                                                        ocation/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     approaches
                                                                                                                                                                                                                                                                                                                                                                                              IA 52242,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ç
                                                                                                                                                                                                                                                                                                  University of Iowa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          facilitate
                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EST 05-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                   RESULT 14
BU131302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             片
                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                        COMMENT
                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                       rocus
                                   TITLE
JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                               778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                              541 AAA 543
                                                                                                                                                                                                                                                                                                                                                                                                                            718
                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            542;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                      l (bases 1 to 823)

1 (bases 1 to 823)

Boardman,P.E., Sanz-Ezquerro,J., Overton,I.M., E Boardman,P.E., Sanz-Ezquerro,J., Wilson,S.A. Fong,W.T., Tickle,C., Brown,W.R.A., Wilson,S.A. A Comprehensive Collection of Chicken cDNAs A Comprehensive (2012), 1965-1969 (2002)
                                                                                                                                                                                                                                        sequence.
BU131302
                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eute
Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
Phasianinae; Gallus.
                                                                                                                                                                           Gallus gallus (chicken)
Gallus gallus
                                                                                                                                                                                                                                                                   BU131302 823
603117191F1 CSEQCHL21 Gallus
                    Contact:
                                                                                                                                                                                                                         BU131302.1
      Department
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                     12445392
                                                                                                                                                                                                                                                                                                                                                                  780
      Simon Hubbard
nt of Biomolecular Sciences
                                                                                                                                                                                                                         GI:25343228
```

bp n gallus

CDNA

clone

ChEST73e23

σ ,

Burt,

:,D.W., Bc 1 Hubbard,

Bosch, rd,S.J.

Euteleostomi;

linear

EST 25-NOV-2002

```
181 GAAATCTATTACTTTGTGGAACAGTTGGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
TCAGAGAGGGGAATATATGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                        TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                      ACAGCCAGCGTCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                    CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                  CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                   CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                         GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGTGCTCATCTGCGCCGGGCAAGGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGCCACGGCGAGGCGCAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCACGGCGAGAGAGAGACCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                                                                                                                                       CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                 TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        size selected according to mRNA size fraction, ligated with EcoR I adaptor, digested with Not I and then cloned directionally into pXY-Asc vector. The library tag sequence located between the Not I site and the polya tail is GATAAGGCCA. Tissue was provided by Mary Hendrix."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   49.0%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 541.4; DB 6;
Pred. No. 4.5e-149;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                               540
                                                                                           717
                                                                                                                                          480
                                                                                                                                                                                            657
                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                     597
                                                                                                                                                                                                                                                                                                                                                                                 537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

```
문
                                                                                                                           δ
                                                                                                                                                        밁
                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
뭉
                    Ş
                                                 밁
                                                                         ঠ
                                                                                                      밁
                                                                                                                                                                                 S
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                      423
                                                                                                                                                          363
                                                                                                                                                                                   385
                                                                                                                                                                                                              303
                                                                                                                                                                                                                                      325
                                                                                                                                                                                                                                                                  243
                                                                                                                                                                                                                                                                                                                       183
                                                 483
                                                                                                                                445
                                                                                                                                                                                                                                                                                           265
                                                                                                                                                                                                                                                                                                                                                205
                                                                                                                                                                                                                                                                                                                                                                        123
                                                                                                                                                                                                                                                                                                                                                                                                   145
                                                                                                                                                                                                                                                                                                                                                                                                                            63
                                                                                                                                                                                                                                                                                                                                                                                                                                                      85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     650;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            University of Manchester Institute of (UMIST)
PO Box 88, Manchester, M60 1QD, UK
Tel: 01612008930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: Simon.Hubbard@umist.ac.uk.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                 CGAGATCTTGGTGCAATTGTTTACTGTGTTTGGTGTGAAAGATTTCAATGAGACACAGCTG
                   GCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTG
                                                                                                      GAACAGATTTACTATGAAAATGTTCATGGTTACAGAACTGCAAGTGTCATCATTGCACTG
                                                                                                                                                                                     GGAACAACCTTAATGAAACTGACAGAAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAA 324
                                                                                                                                                                                                                                                                                                                       TTGGCCCGCAAGTTCATAAGCCCTCAGCTGAGGATGTCCTTCATCGTTTTCTCAACCAGA
                                                                                                                                                                                                                                                                                                                                     TTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCACCCGA
                                                                                                                                                                                                                                                                                                                                                                          CTGGÀCAAATCAGGAAGTGTCCTGCÀCCACTGGÀATGAAATATATCATTTTGTGGAACAT 182
                                                                                                                                                                                                                                                                                                                                                                                         TTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTTGTGGAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                              TGGGAAGAGAGAGAACGGGGGTCCTGCCTACGGAGGGTTTGATTTGTACTTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGATTTGGCTTCAAGTGTTTCTTTCTTTGCGACTTTTCTGCTGGTGTGTGATGGGCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ceecarceecriccaereecricririeeccacricreerecricarcrececeee--caa
 GCGAGAATTGCTGACAGCAAAGATCATGTCTTTCCTGTGAATGATGGTTTTTGAAGCCCTG
                                                                                                                                GGAACAATTCTGATGAGATTAACAGAAGACAGGGAACAGATACGTCAGGGTCTAGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01612360409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone lib="CSEQCHL21"
//note="Organ: trunks; Vector: pBluescript II KS(+);
/note="Organ: trunks; Vector to accommodate cDNA produced iI KS(+) [Stratagene] vector to accommodate cDNA produced with the T-trimmed protocol (Construction of uni-directionally cloned cDNA libraries from messenger RNA for improved 3' end DNA sequencing by Glenn Pu, et al.
U.S. Patent # 6,387,624). Cut pBluescript II KS(+) with NotI and EcoRI. Ligate in double stranded adaptor containing BegI and BamHI sites
[5'ggccgcgtgcagccccggatccggagctgcacgc]"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="mRNA"
/strain="White Leghorn,
/db_xref="taxon:9031"
/clone="ChEST73e23"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /dev_stage="36"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Gallus gallus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                48.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 534; DB 5; 1
Pred. No. 7.3e-147;
0; Mismatches 155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hisex"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Science and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Technology
                                                                                                                                                                                                                                                                                                                                                 264
                                                 542
                                                                            564
                                                                                                       482
                                                                                                                                504
                                                                                                                                                                                     444
                                                                                                                                                                                                               362
                                                                                                                                                                                                                                        384
                                                                                                                                                                                                                                                                  302
                                                                                                                                                                                                                                                                                                                       242
                                                                                                                                                                                                                                                                                                                                                                                                                              122
                                                                                                                                                                                                                                                                                                                                                                                                                                                       144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62
                          624
                                                                                                                                                            422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
CD664532
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                 Ś
                                                 밁
                                                                         Ś
                                                                                                      밁
                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                          Query Match
Best Local S
Matches 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              745
                                                   61
                                                                                                                                                            545;
                                                                                                       μ
```

```
S
                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CD664532
g2b4 IMR32_SSH Homo sap:
CD664532
CD664532.1 GI:40546157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Speleman, F. Center for Medical Genetics Ghent University Hospital De Pintelaan 185, Medical Research Building,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 564)

De Preter, K., Pattyn, F., Berx, G., Strumane, K., Menten, B., Van Roy, F., De Paepa, A., Speleman, F. and Vandesompele, J.

Combined subtractive cDNA cloning and array CGH: an efficient approach for identification of overexpressed genes in DNA amp.

BMC Genomics 5 (1), 11 (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tel: 3292406549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Belgium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mammalia; Eutheria;
Hominidae; Homo.
                                                                       TCTATTCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTG
                                                                                                                                                                                            ACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGAAGCCCTTTTCTGTGGAAGACACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCA
GTGTGAAANATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGT
                    GTGTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGT
                                                                                                                                                       ACAGGACAGCCAGCGTCATCNTTGCTTTGACTGATGGANAACTCCATGAANATCTCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAAGCCTTTTGTCGTGGAAGAGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTCGTAACGTCGACAGAGTACTCTGCAGCTTCAGGATC-ATGACACAGTCACTCTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCAGTATATGTGCAGGAGAGTCATTTCAGGTTGTCGTGAGAGGAAATGGATTTCGACAT
                                                                                                                                                                                                                                   48.3%; ilarity 96.6%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3292404970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   franki.speleman@UGent.be.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol type="mRNA"
/db xref="taxon:9606"
/cell type="Neuroblastoma"
/cell line="IMR-32"
/lab_host="Esherichia coli"
                                                                                                                                                                                                                                                                                                                                 /clone lib="IMR32 SSH"
/note="Vector: pGEM-T Easy;
subtractive hybridisation ($
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          564 bp
sapiens cDNA,
                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                   Score 533.4; DB 6;
Pred. No. 9.4e-147;
                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA sequence.
                                                                                                                                                                                                                                                                                                                                   Y; PCR
(SSH)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA
                                                                                                                                                                                                                                                                                                                                                     select
                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2nd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    floor,
                                                                                                                                                                                                                                                                            564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST 30-MAR-2005
                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA amplicons
                                                                                                                                                                                                                                     Gaps
                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               684
  180
                                      595
                                                                           120
                                                                                                                  535
                                                                                                                                                                                                  475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               744
                                                                                                                                                                                                                                     ۲,
```

	•	•	•	•	•	•	•	•	•	-	·	•	
541	956	481	896	421	836	361	776	301	716	241	656	181	596
ACGGNTTCCATCCTGGCCATCGCC 564	ACGG-TTCCATCCTGGCCATCGCC 978	TGAACGATGGCCTCTCTTTATCTCCAGTTCTGTCATCACCACCACCACACTGTTCTG 540	TGAACGATGGCCTCTTTTATCTCCAGTTCTGTCATCATCACCACACACA	TACTGTGTCCAGCGCCTATCTTAAAANAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCA 480	TACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCA 895	TCAANATCAATGACTCGGTCACACTCAATGANAAGCCCTTTTCTGTGGAAGATACTTATT 420	TCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATT 835	TTGTCGNGAGAGAAACGGCTTCCGACATGCCCGCAACGNGGACNGGGNCCTCTGCAGCT 360	TIGTCGTGAGAGGAAACGGCTTCCGACATGCCCCGCAACGTGGACAGGGTCCTCTGCAGCT 775	CCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGANAGTCATTTCAAG 300	CCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAG 715	TTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCANTTTTGAANAAGT 240	TTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGT 655

9 9 9 9 9 9 9 9 9 9 9 9 9

Search completed: December 19, 2005, 00:48:43 Job time : 4992.04 secs



```
Title:
Perfect score:
                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                      Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OM nucleic -
                                                                                                                                                                                                                                                                                                                                                 seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic search, using sw model
Issued_Patents_NA:*

1: /cgn2_6/ptodata/1/ina/1_COMB.seq:*

2: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

7: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

8: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

9: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          December 17, 2005, 10:16:44; Search time 207.822 Seconds (without alignments) 9442.828 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1303057 seqs, 888780828 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-1_COPY_104_1207
1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                         2606114
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	21	Result
0000 0000 0000 0000 0000 0000 0000 0000 0000	803.8 516.8	Score
7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	72.8 46.8	Query Match
2234 1492 1492 450 7216 399 398 398 3182 1141 3782 1141 3782 1141 3489 3489 3489 3489 3489 3489 3489 3489	1609 3981	Query Match Length
	ωω	ad
US-10-104-047-669 US-09-774-528-297 US-10-120-988-297 US-10-131-827-8330 US-08-232-463-14 US-09-621-976-8976 US-08-232-463-14 US-09-806-7008-22 US-09-949-016-16291 US-09-949-016-16291 US-09-949-568-1 US-09-949-568-1 US-09-894-273-1 US-09-894-273-1 US-09-894-273-1 US-09-894-273-1 US-09-894-273-1 US-09-894-273-1 US-09-894-273-1 US-09-894-273-3 US-09-894-273-3 US-09-894-273-3 US-09-894-273-3 US-09-894-273-3 US-09-894-273-3 US-09-894-371-20 US-09-895-982-368 US-09-894-371-20 US-09-825-982-368 US-09-825-981-3 US-09-825-981-3 US-09-825-981-3 US-09-825-984-1 US-09-643-990A-1 US-09-643-990A-1 US-09-658-665-1	US-09-620-312D-8 US-09-799-451-250	ID
Sequence 669, App Sequence 297, App Sequence 297, App Sequence 8310, Ap Sequence 14, Appl Sequence 14, Appl Sequence 12, Appl Sequence 12, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 20, Appl Sequence 20, Appl Sequence 20, Appl Sequence 20, Appl Sequence 30, Appl Sequence 31, Appl Sequence 31, Appl Sequence 31, Appl Sequence 31, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli	Sequence 8, Appli Sequence 250, App	Description

											Ω								ი	
45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6			36.8	
3.2	3 .2	3.2	3.2	3.2	3.2		3.2		3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	ω ω	ω .ω	3.3	ω. 
2422	2409	2138	1440	1440	1440	1440	1440	1440	2368	2368	2278	2278	2278	2278	2278	424	5299	2198	421883	287902
N	w	w	ტ	w	w	N	N	N	w	w	w	w	w	ω	w	w	ω	w	w	(L)
US-08-475-845-1	US-09-949-016-2968	US-10-030-203-12	PCT-US93-04493-3	US-09-009-656-13	US-09-009-217-13	US-08-321-777-3	US-08-021-615A-3	US-07-882-202A-3	US-10-020-445A-471	US-09-999-833A-471	US-09-621-011-131	US-09-621-011-78	US-09-148-545-131	US-09-148-545-78	US-09-620-312D-1003	US-09-621-976-7975	US-09-902-540-645	US-09-533-559-842	US-09-949-016-12557	US-09-949-016-14543
Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	sequence
1, Appli	2968, Ap	12, Appl	3, Appli	13, Appl	13, Appl	3, Appli	<ol> <li>Appli</li> </ol>	3, Appli	471, App	471, App	131, App	78, App1			1003, Ap	7975, Ap		842, App	12557, A	14543, A

## ALIGNMENTS

```
APPLICANT: Man, Yunqing
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Zhiwei
APPLICANT: Wang, Zhiwei
APPLICANT: Wang, Tahwei
APPLICANT: John Tillinghast
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6569662el Nucleic Acids and
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 7840IP2B
CURRENT FILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: US/09/620,312D
CURRENT FILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: 09/488,725
PRIOR FILING DATE: 2000-01-21
NUMBER OF SEQ ID NOS: 1105
SOFTWARE: pt_FL_genes Version 1.0
SEQ ID NO 8
I.ENGTH: 1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-620-312D-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1
US-09-620-312D-8
Query Match 72.8%;
Best Local Similarity 99.8%;
Matches 805; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 8, Application US/09620312D Patent No. 6569662
                                                                                    LENGTH: 1609
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (309)..(1202)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Xue, Aidong J.
Yang, Yonghong
Wang, Jian-Rui
Zhou, Ping
Score 803.8; DB 3;
Pred. No. 9e-250;
"'amatches 2;
                                     Length 1609;
```

Indels

0;

Gaps

```
Sequence 250, Application US/09799451
Patent No. 6783969
GENERAL INFORMATION:
APPLICANT: Tang, Y. Tom
APPLICANT: Zhou, Ping
APPLICANT: Zhou, Ping
APPLICANT: Asundi, Vinod
APPLICANT: Ren, Feiyan
APPLICANT: Ren, Feiyan
APPLICANT: Xue, Aidong J.
APPLICANT: Xue, Aidong J.
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Jian-Rui
APPLICANT: Yamazaki, Victoria
APPLICANT: Chen, Rui-hong
                                                                                                                                                                                                                                      RESULT 2
US-09-799-451-250
                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                               1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   309
                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                           969
                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                  ATCAATGACTCGGTCACACTCAATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGTGCTCATCTGCGCCGGGCAAGGGGGAGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                 GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAGAGAGGGAAGATAAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                    1115
                                                                                                                                                                                                                                                                                                                                  807
                                                                                                                                                                                                                                                                                                                                                                                                                             1028
                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; APPLICANT: Wang, Zhiwei
; APPLICANT: Wang, Dunrui
; APPLICANT: Wang, Dunrui
; APPLICANT: Wang, Yonghong
; APPLICANT: Wehrman, Tom
APPLICANT: Branac, Radoje T.
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 803
; CURRENT APPLICATION NUMBER: US/09/799,45
; CURRENT APPLICATION NUMBER: US/09/799,45
; CURRENT FILING DATE: 2001-03-05
; NUMBER OF SEQ ID NOS: 948
; SOFTWARE: pt_FL_genes Version 2.0
; SEQ ID NO 250
; LENGTH: 3981
; TYPE: DNA
                                                                                                                            RESULT 3
US-10-104-047-669
                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                     음 성
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapiens FEATURE: FATURE: CDS LOCATION: (297)..(1118)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
Sequence 669, Application US/10104047
PATENT NO. 6943241
GENERRAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: NO. 6943241e1 full length
FILE REFERENCE: H1-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 518; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        815
                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                    995
                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                             875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          575
                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTTCAGGCTCTGCAAGGCATCA
                                                                                                                                                                                                              AGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAAA 1094
                                                                                                                                                                                                                                                                             TGCTCCTAGCCCTGGCTCTCCTCTGGTGGTTCTGGCCCCTCTGCTGCACTGTGATTATCA 105
                                                                                                                                                                                                                                                                                                                 TCACCACCACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGGTGATCCTGTTCC
                                                                                                                                                                                                                                                                                                                                 TCACCACCACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATCCTGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                AAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTATCTCCAGTTCTGTCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATAT
                                                                                                                                                                                           AGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                              AAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTATCTCCAGGTTCTGTCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGGACAGTAAGGATCATGTTTTCCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   46.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 516.8; DB 3;
Pred. No. 2.4e-156;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 3981;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
```

0

120 694

754

360 934 300

874 240 814 180

480

```
PRIOR APPLICATION NUMBER:
PRIOR FILLING DATE:
NUMBER OF SEQ ID NOS: 4096
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 669
LENGTH: 2234
TYPE: DNA
ORGANISM: Homo sapiens
US-10-104-047-669
                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                      밁
                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                          몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
맑
                     ફ
                                                            밁
                                                                                  र्
                                                                                                                      밁
                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 31.4%;
Best Local Similarity 58.3%;
Matches 628; Conservative
                                                                                                                                                                                                                                                       1123
1363
                                                                                                                           1243
                                                                                                                                                                                         1183
                                                                                                                                                                                                                                                                                                                     1063
                                                                                                                                                                                                                                                                                                                                                                                     1003
                                                                                                                                                          721
                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            529
                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                   943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             709
                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 ATGGCCACGGCGGAGCCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                          AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGGACAGTAAGGATCATGTGTTTCCC 600
                                                                                                                                                                                                                                                                                                                                                                                                        TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGGT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGGAGACACTTACATG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTTTATTGTTTTCTCCACCCGAGGAACCAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCACGGACGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGTGGCGGAGCGCCCGGGCCCCGGGAGCTGGCTGTTCCCCGGGCTGTGG
                                                                                                                                                                                                                                                                                                                       CTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAGCAAGTTTTCCCT
                                                                                                                                                                                                                                                                                                                                                                                   ACAGCCAGCGTCATCATTGCTTTGACTGATGAGAACTCCATGAAGATCTCTTTTTCTAT 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAATCAGTAAAGGCTTGGAGGATTTAAAACGTGTTAGTCCAGTAGGAGAGACATATATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAATTTATAATTTCGTACAGCAACTTGCGGAGAGATTTGTGAGCCCCTGAAATGAGATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAGCCTTTGATCTCTACTTCGTCCTGGACAAGTCTGGGAGTGTGGCCAAATAACTGGATT
                                                                                     ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGACACTTATTTACTG 840
                                                                                                                           TTAAGTGGAAGAGGATTCATGCTGGGCAGTCGGAATGGCAGTGTTCTCTGCACTTACACT 130
                                                                                                                                                          GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG 780
                                                                                                                                                                                         ACTGAAATCCTAGAATTGCAGCCCTCAAGTGTCTGTGTGGGGGGAGGAATTTCAGATTGTC
                                                                                                                                                                                                          ATCGAAATTCTAGCAGCTGAACCATCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                      GTCAAAGGTGGATTTCAGGCTCTTAAAGGAATAATTCATACTAGCTCAGTCATGT
                                                                                                                                                                                                                                                                                      GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATGAAGGACTAAAGCTAGCGAATGAACAAAT----TCAGAAAGCAGGAGGCTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTTTCATTGTGTTTTCTTCAAGCAACTATTATTTTGCCATTAACTGGAGACAGAGGC
                                                            GTANATGANACATATACAACGAGTGTAAAACCAGTAAGTGTACAGCTTAATTCTATGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCTCCAGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTGGTGCCATCATAT
TGTCCTGCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCAGTGAGCTTTAAT 1422
                          TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 346.2; DB 3;
Pred. No. 3.7e-101;
0; Mismatches 443;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                       1182
                                                                                                                                                                                                                                                                                                                         1122
                                                                                                                                                                                                                                                                                                                                                                                     1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              648
                                                                                                                                                                                           1242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
```

```
FILE REFERENCE: 802
CURRENT APPLICATION NUMBER: US/09/774,52:
CURRENT FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
SOFTWARE: pt_FL_genes Version 2.0
SEQ ID NO 297
LENGTH: 1492
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (79)...(1434)
US-09-774-528-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 4
US-09-774-528-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                 S
                                                                                                                                    뭐
                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Liu, Chenghua
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Ren, Felyan
APPLICANT: Zhang, Jie
APPLICANT: Zhang, Jie
APPLICANT: Zhang, Jing A.
APPLICANT: Yang, Yonghong
APPLICANT: Wehrman, Tom
APPLICANT: Wehrman, Tom
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Dunrui
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6743619el Nu
TITLE OF INVENTION: Polypeptides
FILE APPERENCE: A02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 297, Application Patent No. 6743619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          y Match 27.8%;
Local Similarity 59.2%;
hes 546; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    106
                                                                                                                                                                                                                                                                                       122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           155 CAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACA
                                                                                                                                                                                                                                                                                                                                                               275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N
                                                            ATTATGAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAG 454
                                                                                                                                                                                                                                                                                                                                    TAATGAAACTGACAGAAGAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCT 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGTTTTGGCCCCTTTGCTGCAAAGTGGTTATTAAGGATCCTCCACCACCACCCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCCTGCC 1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCGCAGCCATCATTGTTATTTTGGTGTTACTGCTACTCCTGGGGATCGGTTTGATGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 recarecresectares recreated and recreated associated and recovered to the recovered and recovered associated asociated associated associated associated associated associated as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAGGAAAATCTGTCATTTCAGGATCATTAATTGTCACAGCCACAGAATGTTCTAACGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATGGCCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                       TTTTGCCATTAACTGGAGACAGAGGCAAAATCAGTAAAGGCTTGGAGGATTTAAAACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                  GATTTGTGAGCCCTGAAATGAGATTATCTTTCATTGTGTTTTCTTCTCAAGCAACTATTA 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACGCCGCCGGGCGAATAACTGGATTGAAATTTATAATTTCGTACAGCAACTTGCGGAGA
                                                                                                                                                                             TTCTGCCAGGAGGAGACACTTACATGCATGAAAGGATTTGAAAGGGCCAGTGAGCAGATTT 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tang, Y. To
Zhou, Ping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Goodrich, Ryle
TCAGAAAGCAGGAGGCTTGAAAACCTCCAGTATCATAATTGCTCTGACAGATGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/09774528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 307.4; DB 3;
Pred. No. 1.1e-88;
0; Mismatches 371;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1492;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             214
                                                                                                                                               239
```

٠. و

Gaps

61 214

274

295

454 239 394 181

```
RESULT 5
US-10-120-988-297
US-10-120-988-297
Sequence 297, Application US/10120988
Patent No. 6919193
GENERAL INFORMATION:
APPLICANT: Goodrich, Ryle
APPLICANT: Liu, Chenghua
APPLICANT: Liu, Chenghua
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6919193el Nucleic Acids and TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 802CON
CURRENT APPLICATION NUMBER: US/10/120,988
CURRENT APPLICATION NUMBER: 09/774,528
PRIOR FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
SOPTWARE: put FL genes Version 2.0
LENGTH: 1492
Type: NAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
FEATURE:
NAME/KEY: CDS
LOCATION: (79)..(1434)
US-10-120-988-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                    LENGTH: 1492
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGAGGTCCCTCCACCCCCTGCC 1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTTTTTATCTCCAGTTCTGTCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGCTAGTGTTTATTGTGTTGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACTCCTGGGGATCGGTTGATGTGGTGGTTTTTGGCCCCTTTGCTGCAAAGTGGTTATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   recrecraecerecrecreregreerreregeeeeererecreearranea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCACAGCCACAGAATGTTCTAACGGGATCGCAGCCATCATTGTTATTTTGGTGTTACTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rcaccaccacacacrerrerescerrecarcerescentescerrecrearcererrec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAAGTGTACAGCTTAATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGCAGTGTTCTCTGCACTTACACTGTAAATGAAACATATACAACGAGTGTAAAAACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ĠŢĠŢĠĠĠĠĠĠĠĠĀŢŢŢĊĀĠĀŢŢĠŢĊŢŢĀĀĠŢĠĠĀĀĠĀĠĀŢŢĊĀŢĠĊŢĠĠĊĀĠŢĊĠŖ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTAATTCTATACTAGCTCAGTCATGTÁCTGAAATCCTAGAATTGCAGCCCTCAAGTGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGATCCTCCACCACCACCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCTTGATGTTTCAGTGAGCTTTAATGGAGGAAAATCTGTCATTTCAGGATCATTAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>AGTTGGACGGTCTGGTGCCATCATATGCAGAGAAAGAGGCAAAGATATCCAGGTCACTTG</u>
                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                   RESULT 6
US-10-131-827-8330
                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                       Ş
                                                                                                                                                           밁
                                                                                                                                                                                     Ş
                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                            뫄
   ; Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 546; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     215 AATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      155 CAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTTGTGGAACAGTTGGCTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62
 8330, Application
                                                                                                                AGGAGGTCCCTCCACCCCCTGCC 1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGAACACAGCTGGCCCGGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATTTGTGAGCCCTGAAATGAGATTATCTTTCATTGTGTTTTCTTCTAGCAACTATTA
                                                                                                                                                                                                                                                                                                                                    AAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTTTTTATCTCCAGTTCTGTCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGACAGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGTGGGGGAGGAATTTCAGATTGTCTTAAGTGGAAGAGGATTCATGCTGGGCAGTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTAATTCTATACTAGCTCAGTCATGTACTGAAATCCTAGAATTGCAGCCCTCAAGTGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGATTCCAAGGAGCAAGTTTTCCCTGTCAAAGGTGGATTTCAGGCTCTTAAAGGAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTTCAGGCTTCTGCAAGGCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGCTAGTGTTATTGTGTTGGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ---TCAGAAAGCAGGAGGCTTGAAAACCTCCAGTATCATAATTGCTCTGACAGATGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTATGAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCCAGTGAGCAGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTTGCCATTAACTGGAGACAGAGGCAAAATCAGTAAAGGCTTGGAGGATTTAAAACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACGCCGCCGGGGATAACTGGATTGAAATTTATAATTTCGTACAGCAACTTGCGGAGA
                                                                                            AGGATCCTCCACCACCACCCCC
                                                                                                                                                               TACTCCTGGGGATCGGTTTGATGTGGTGGTTTTTGGCCCCTTTGCTGCAAAGTGGTTATTA
                                                                                                                                                                                     TCACAGCCACAGAATGTTCTAACGGGATCGCAGCCATCATTGTTATTTTGGTGTTACTGC
                                                                                                                                                                                                                                                      TCACCACACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATCCTGTTCC
                                                                                                                                                                                                                                                                                                     CTCTTGATGTTTCAGTGAGCTTTAATGGAGGAAAATCTGTCATTTCAGGATCATTAATTG
                                                                                                                                                                                                                                                                                                                                                                          TAAGTGTACAGCTTAATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                           TTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCAGTGTTCTCTGCACTTACACTGTAAATGAAACATATACAACGAGTGTAAAACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTTGGACGGTCTGGTGCCATCATATGCAGAGAGAGAGGCAAAGATATCCAGGTCACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTAGTCCAGTAGGAGAGACATATATCCATGAAGGACTAAAGCTAGCGAATGAACAAAT--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27.8%; ilarity 59.2%; Conservative
   US/10131827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 307.4; DB 3;
Pred. No. 1.1e-88;
0; Mismatches 371;
                                                                                          918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1492;
```

1054

835

715 874 814

754

```
FILE REFERENCE: 506612000120
CURRENT APPLICATION NUMBER: US/10/131,827
CURRENT APPLICATION NUMBER: US/10/131,827
CURRENT FILING DATE: 2002-09-06
PRIOR APPLICATION NUMBER: US 10/006,290
PRIOR FILING DATE: 2001-02
PRIOR APPLICATION NUMBER: US 60/296,764
PRIOR APPLICATION NUMBER: US 60/296,764
PRIOR FILING DATE: 2001-06-08
NUMBER OF SEQ ID NOS: 9090
SOFTWARE: PAtentin version 3.1
SEQ ID NO 8330
LENGTH: 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-131-827-8330
                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-232-463-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                         Sequence 14, Application US/08232463
Patent No. 5670367
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Ly, Ngoc
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING AUTOIMMUN
TITLE OF INVENTION: CHRONIC INFLAMMATORY DISEASES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wohlgemuth,
APPLICANT: Fry, Kirk
APPLICANT: Woodward, I
APPLICANT: Ly, Ngoc
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/232,463
                                                                                                                                                                                                                                                                                       APPLICANT: DORNER, F.
APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKUER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
NUMBER OF SEQUENCES: 52
                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                              ZIP: 22313-0299
                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                          CITY: Alexandria
                                                                                                                                                                                                                               STREET:
                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1069 CCCCCTGCC 1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 829 ACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAG 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6905827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTCTCCTCTGGTGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCA 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTG 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGCTTTAATGGAGGAAAATCTGTCATTTCAGGATCATTAATTGTCACAGCCACAGAA 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Accecece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTTTGATGTGGTGGTTTTGGTCCCTTTGCTGCTAAGTGGTTATTAAGGGATCCTCCACC 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTTCTAACGGGATCGCAGCCATCATTGTTATTTTGGTGTTACTGCTACTCCTGGGGATC 189
                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Woodward, Robert
                                                                                                                                                                                                                             E: Foley & Lardner
1800 Diagonal Road,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7.2%;
57.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Jay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches 106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 79.4; DB 3; Pred. No. 4.9e-15;
                                                                                                                                                                                                                               Suite 500
                                              #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 450;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.
```

NUMBER OF SEQ ID NOS: 19335 SOFTWARE: Patent.pm SEQ ID NO 8976 LENGTH: 399

APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET.054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21

```
US-09-621-976-8976/c
                                                                                                                                                                                 밁
                                                                                                                                                                                                            á
                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; CLONE: pTZgpt-F1s
US-08-232-463-14
Sequence 8976, Application US/09621976
Patent No. 6639063
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 4.3%; Score 47; DB 2; Best Local Similarity 6.7%; Pred. No. 0.0011;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX: 899149
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION UNMER: 29,768
REFERENCE/DOCKET NUMBER: 3047
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)836-9300
TELEFAX: (703)683-4109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: APPLICATION NUMBER: FILING DATE: 26-AUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                 1371 ΥΥΥΥΥΥΥΥΥΥΥΥΥΥΥΥΥΥΥΥΥΥΥΥΥΥ 1399
                                                                                                                                                                                                                                                                                                                                                                           1049 TTATCAAGGAGGTCCCTCCACCCCCTGCC 1077
                                                                                                                                                                                                                                                                                                                                                                                                                                            689 CCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCC 748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26;
                                                                                                                                                                               TCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATCC 988
                                                                                                                                                                                                                                                                                                             GCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCTG 928
                                                                                                                                                                                                                                                                                                                                                                                                          AGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTG 868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCATACGCTCACAGAATTAATTCCGAGCTTGGCTGCAGGTCGAGGGAGCTTGCGATYYYY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGA 808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7218 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative 199;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EP 91 114 300.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US/07/935,313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30472/114 IMMU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         164; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 7218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1070
```

```
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-621-976-8976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 9
US-08-232-463-14/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 14, Application Patent No. 5670367
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 3.8%; Score 42.4; DB 3; Length 399; Best Local Similarity 8.9%; Pred. No. 0.0046; Matches 25; Conservative 142; Mismatches 113; Indels
                                                                                 TELEFAX: (703)683-4109
TELEX: 899149
INFORMATION FOR SEQ ID NO:
                                                                                                                                             APPLICATION NUMBER: EP 91 114 300.6
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 30472/114 IMMU
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)836-9300
                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: DORNER, F.
APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKMER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
NUMBER OF SEQUENCES: 52
                  SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                            TELEPHONE: (703) 683-4109
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Foley & Lardner STREET: 1800 Diagonal Road,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 164 RKWTRWTYYYYKSYMSMKKTWRMKTÄYYWTKRWKMTRTKWTWCTMCWKCTTYWMAGTMMY 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       126 ATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAAT 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   246 TATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTG 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    224 GSRSTGYYAWMYKKSWCTSRKWMYYKKRRKKWRRKCTSTKRTCYRGSTYKCWKAYYTKKR 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       284 SRRGSTGRWSYRRAMWRGSKSWGGGSYYRMAGYRSSRWRSWYSAMWRKKKMTCWKGRSSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6 CACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22313-0299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YMMKWSKMTYWSMMSCYARKCWRTYAKTYTWMTCMTWGKR 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RYRRYWYYAKRAKWSKRCTWSTTCYCMKYMAKKCWSYWWSMSMMKWGKSMWWKWTYYYYY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTATTACTTTGTGGAACAGTTGGCTCACAATTCATCAGCCCACAGTTGAGAATGTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/08232463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                USA
                                                                                                                                                                                                                                                                                                                                               US/07/935,313
                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/232,463
                                                                                     14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  65
```

```
IMMEDIATE SOURCE: ; CLONE: pTZgpt-
US-08-232-463-14
                         8
                                                                                                                                                                               ; FEATURE:
; NAME/KEY: promoter
; LOCATION: (1)..(1141)
; OTHER INFORMATION: consensus sequence of A.t., L.a.,
US-09-806-708B-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
밁
                                                          밁
                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-806-708B-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
                                                                                                                                                                                                                                                                                                                                              Sequence 22, Application US/09806708B
Patent No. 6784342
GENERAL INFORMATION:
APPLICANT: The University of British Columbia
TITLE OF INVENTION: Regulation of Embryonic Transcription
FILE REFERENCE: 4810-58741
CURRENT APPLICATION NUMBER: US/09/806,708B
CURRENT FILING DATE: 2001-04-03
PRIOR APPLICATION NUMBER: US 60/147,133
PRIOR FILING DATE: 1999-08-04
                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn version 3.0 SEQ ID NO 22
                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                        LENGTH: 1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               263 GAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAACAAATCCGTCAAGGCCTAGAAG 322
158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        286 ACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGA 345
                                                                                        226 CCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27;
                                                            98 YHARRWKDMKTAYBMTMTNKWGKTGWRHRYWRWRAMBDTVDHHYVTAMNNAWTTMCMMDK
                                                                                                                      68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DDKRTRWWKKNNNATGWDDDTKYHMWNNNGCBTVTWMVRYKTDRDWSBKRMNYGMBWWK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAGC 562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCAGCCAAGCTCGGAATTAATTCTGTGAGCGTATGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTCAGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        pTZgpt-F1s
                                                                                                                     Conservative 270;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative 198;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.8%;
                                                                                                                                   9.8%;
                                                                                                                     3.7%; Score 40.6; DB 3;
9.8%; Pred. No. 0.036;
ive 270; Mismatches 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 41.4; DB 2; Length 7
Pred. No. 0.07;
98; Mismatches 174; Indels
                                                                                                                      353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 7218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                 Length 1141;
                                                                                                                      Indels
                                                                                                                                                                                                 and B.n. FAE1
                                                                                                                                                                                                                                                                                                                                                                                                                                ä
                                                                                                                                                                                                                                                                                                                                                                                                                                 Plante
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                      2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                      Gaps
                                                                                                                                                                                                 promoters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1228
217
                                                            157
                                                                                          285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1048
```

```
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FRABESEQ for Windows Version 4.0
SEQ ID NO 16291
LENGTH: 37822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
US-09-949-016-16291/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                  ; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1). T. (37822)
; OTHER INFORMATION: n = A,T,C
US-09-949-016-16291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 16291, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: MITH HUMAN DISEASE, METHODS
                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: CL001307
                                                                                                                                             ORGANISM: Human
                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGATCTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WINATOTRRIMWKUNNNNNAGTWKUNNNNNAKNASAAKNYAAAAVKAAKKHWRWANKWAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WDYWWKACTWYKYBVCSKWWNNYAAWYTKSSWNYTSRYYRWKTNNSWRWRSDTRSMGRAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RAWDHKTCTHNNTTWWKMKTYWNNCYWKSMTNGKSHRBAAAVYTWYMWWRRYAHANNNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VNNNNGTTMWKRMWAWYWKMDMDWBGTYNNNNNGGRTYYGWTKNKKMWTYYKWKANNCKW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MINININIAKAMCKRAKYWGWNRABVNSTCTTWKSKTTKVRTSCWANNCRAGDANKDHKWW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGACAAGGGTACAGGACAGCGTCATCATTGCTTTGA---CTGATGGAGAACTCCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NWSYDVTYYWWVWDDMCKRKVRRWVRTRGRMRNYMVAWBTAHRRRYNNGWTBAMAYRRWT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RGWHADAAABTTDKRNNGAYTKYTTTNNNNTYR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCAGGTCAGCATGAACGATGGCCTCTCTTTTA 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNINNNNNNNNNNNNNNNN TCARDDYYAASRWY AMANAKWYYY KBAANNA YYTHANNWWGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTCATTTCAAGTTGTCGTGAGAGGAAAACGGCTTCCGACATGCCCGCAACGTGGACAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KWSAAMGVYWNNNNNNWTYKKARHBARWDWVWHSAWKKWHANAAHYSRKKWTBYKRKTM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGG
 3.6%;
                                                                      ę,
 Score
Pred.
                                                                        G
 No.;
 DB 3
0.61;
                ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                790
                                                                                                                                                                                                                                                                                                                                                                                                             ASSOCIATED OF DETECTION AND USES THEREOF
                  Length 37822;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          405
```

```
; NAME/KBY: promoter ; LOCATION: (1)..(1141) ; LOCATION: (1)..(1141) ; OTHER INFORMATION: consensus sequence US-09-806-708B-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
US-09-806-708B-22/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                             S
                                                                                                                                                                                    밁
                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 22, Application US/09806708B Patent No. 6784342 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn version 3.0 SEQ ID NO 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: The University of British Columbia TITLE OF INVENTION: Regulation of Embryonic Transcription FILE REFERENCE: 4810-58741 CURRENT APPLICATION NUMBER: US/09/806,708B CURRENT FILING DATE: 2001-04-03 PRIOR APPLICATION NUMBER: US 60/147,133 PRIOR APPLICATION NUMBER: US 60/147,133 PRIOR FILING DATE: 1999-08-04 NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 1141
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8087 TCCAGTTTTCAGCAAAACGTATAAGACACACAAAGAAACAGGAAAGTATGGCTCAT 8032
                                                                                                                                                                                                                                                      807
                                                                                                                                                                                                                                                                                        466
                                                                                                                                                                                                                                                                                                                         867
                                                                                                                                                                                                                                                                                                                                                        406
                                                                                                                                                                                                                                                                                                                                                                                                                           346
                                                                                                                                                      586
                                                                                                                                                                                                                                                                                                                                                                                          927 MKAKNINININAYWTACYNRAATINIKMATHWMKWTHGAHSKRRTRHHTRTCRRTKYNINININ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            286 ACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               89,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
RWTMKGDGMTVRKKVKWRDTTCTYVDVWADSWVWWYANWMRCRDVTYTRNNTYCKSYAHS
                                                                                                                                                                                                                                                      NNNNTWCHYTTANABBCYRANNNNAAARMARTCNNYMHAAVTTTHTDWCYKTWMNTWYWD
                                                                                                                                                                                                                                                                                                                                                        AGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAA 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAKWARWAGNNMRMYGAAAGNKWGCMAAMATMGBWWADTAGKMCNNNNNWTTDVRRMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAGAAACCCAGGTAGGGGAAAGAATCTGAGTTTCTAGAATAGACACATTATTTTAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTA
                                                                                  TTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAG 705
                                                                                                                     RTNNTTVMRRRWTNTKTRWYSTTRRHHYTGATNNNNNNNNNNNNNNNNNSCCTCTRMMTM
                                                                                                                                                      GATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATT
                                                                                                                                                                                       MMTTMBTTTTRNMTTSTNMTNNNNNMWACTNNNNNNMWKAYYAHATNNWGCWWNNTDAR
                                                                                                                                                                                                                       TACTGTGTTGGTGAAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAG
                                                                                                                                                                                                                                                                                      GATCTCTTTTTCTATTCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTT
                                                                                                                                                                                                                                                                                                                       NARTVYWYHHAARRWMNAWWTRTNNNNNNNNNNACRNTRTWWABWKHSWCNNNNNNNNNN
                                                                                                                                                                                                                                                                                                                                                                                                                           GGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.4%; Score 37.6; DB 10.9%; Pred. No. 0.34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               281;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of A.t.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               443;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 85;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L.a.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and B.n.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          in Plants
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FAE1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   promoters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               378
                                                                                                                        628
                                                                                                                                                          645
                                                                                                                                                                                       889
                                                                                                                                                                                                                                                                                         525
                                                                                                                                                                                                                                                                                                                            808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8088
                                                        568
                                                                                                                                                                                                                         585
                                                                                                                                                                                                                                                            748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               _
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-728-323A-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/08728323A Patent No. 5948676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Chang,
APPLICANT: Bohenz
                                               SEQUENCE CHARACTERISTICS:
LENGTH: 3489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                   INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version:
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: White, John P
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 05'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 1185 AVER
CITY: New York
STATE: New York
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                    FILING DATE:
CLASSIFICATION: 435
NAME/KEY:
                                                                                                                                                                                      TELEPHONE:
                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1006 CTGGCTCTCCTCTGGTGGTTCTGGCCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCCT 1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          213 KCRNKYMVSWHYHAMRYBKWABAVGCNNNWKDRMAHHHW 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               333 HMNTHCTYGNNTWGSAYBMAAMSMWAAGASNBVTYNWCWRMTYMGKTMTNNNNNNKAWYY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   946 CACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCC 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        393 MRVAWMYSRDTTNTDWMMWTSDWBWHWYTVDYTMMRAWNNNNNWRBCKTTSWMWWMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            886 CAGGTCAGCATGAACGATGGCCTCTCTTTATCTCCAGGTTCTGTCATCATCACCACCACA 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    447 RAWKMMIMAWCRRAYCCNNINNRACVWHKHK-----MWRWTWKYMWKAACNINNBKAMY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        826 GACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             507 WWWKRWARBTTTVYDSMCNAKSMWRGNNWRAMKMWWAANNDAGAMDHWTYWMGNNTMWMR 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YWYWSNNAMWYRRYSARNWSSMARWTTRNNWWMSGBVRMRWAGTMWWRHWNNNNTDTRYY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bohenzky, Roy A.
Russo, James J.
Edelman, Isidore S.
Moore, Patrick S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1185 Avenue
                                                                                                                                                                      212-391-0525
CDS
                                                                                                                                                                                        212-278-0400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cooper &
                               DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yuan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Immediate Early Protein From Kaposi's Sarcoma-Associated Herpesvirus, DNA Encoding Same And Uses Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                             US/08/728,323A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dunham LLP
of the Americas
                                                                                                                                                                                                                              0575/52268/JPW/MSC/SKS
                                                                                                                                                                                                                                                                                                                                                                                   #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        885
               RESULT 15
US-09-410-399-1/c
; Sequence 1, Application US/09410399
; Patent No. 6482587
```

```
밁
                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LOCATION:
US-08-728-323A-1
                                                                                             5
                                                                                                                                                             Ś
                                                                                                                                                                                                밁
                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                      US-09-298-568-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-298-568-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 3.4%;
Best Local Similarity 50.3%;
Matches 92; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO
                                                                                                                                                                                                                                                                                  Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Appli
Patent No. 632279
                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: 16412-10001R
CURRENT APPLICATION NUMBER: US/09/298,568
CURRENT FILING DATE: 1999-04-21
EARLIER APPLICATION NUMBER: US 60/109,422
EARLIER FILING DATE: 1998-11-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Kieff, Elliott D.
APPLICANT: Ballestas, Mary E.
APPLICANT: Kaye, Kenneth M.
TITLE OF INVENTION: RHADINO VIRUS LANA ACTS IN TRANS ON A UNIT OF RHADINO TITLE OF INVENTION: VIRUS DNA TO MEDIATE EFFICIENT EPISOME PERSISTENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 3
                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Kaposi's sarcoma-associated herpesvirus
                                                                                                                                                                                                                                                                                                                                                                                   ENGTH:
                               1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1003
                                                                 1029 CTCCTCGTCCTCATCTGTCTCCTGCTCCTCCTCATCATCCTTATTGTCATTGTCATC
                                                                                                                                   1089
                                                                                                                                                        943 ACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGATCCTGATCCTGCTTCCTGCTCCTA 1002
969
                                                                                                                                                                                                                                 883 CTCCAGGTCAGCATGAACGATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          883 CTCCAGGTCAGCATGAACGATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACC 942
                                                                                                                                                                                                                                                                                                                                                                                   3489
                                                                                                                                                                                                                                                                    92;
                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTA 1002
                               CCT 1065
                                                                                               CTCCTCGTCATCCTCGTCATCCTCCTCGTCATCCTCGTCATCCTCCTCGTCATC 1030
                                                                                                                                                                                                  CTCCTCGTCATCCTCGTCATCCTCCTCGTCATCCTCGTCATCCTCCTCGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCCTCGTCCTCATCTGTCTCCTCCTCCTCATCATCCTTATTGTCATTGTCATC 970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCCCTGGCTCTCCTGGTGGTTCTGGCCCCCTCTGCTGCACTGTGATTATCAAGGAGGTC 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCCTCGTCATCCTCGTCATCCTCGTCATCCTCGTCATCCTCGTCATCCTCGTCATC 1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCT 1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/09298568
                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1..3489
                                                                                                                                                                                                                                                                                3.4%;
                                                                                                                                                                                                                                                                  <u>.</u>.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 37.4; DB
Pred. No. 0.85;
0; Mismatches
                                                                                                                                                                                                                                                                                   Score 37.4;
Pred. No. 0
                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                     .
85
                                                                                                                                                                                                                                                                                                 DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91;
                                                                                                                                                                                                                                                                    91;
                                                                                                                                                                                                                                                                                                 Length 3489;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 3489;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                    1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1090
                                                                                                                                                                                                                                     942
                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

GENERAL INFORMATION:

```
APPLICANT: Robertson, Erle S.
APPLICANT: Cotter, Murray A.
TITILE OF INVENTION: Methods to Inhibit or Enhance the Binding of Viral DNA
FILE OF INVENTION: to Genomic Host DNA
FILE REFERENCE: UM-03778
CURRENT FILING DATE: 199-10-01
NUMBER: OF SEQ ID NOS: 6
SOFTWARE: PatentIN Ver. 2.0
SEQ ID NO 1
LENGTH: 3489
TYPE: DNA
NCANISM: Kaposi's sarcoma-associated herpesvirus
US-09-410-399-1
Search completed: December 17, 2005, 13:37:40 Job time : 215.822 secs
                                                                                            밁
                                                                                                                             र्
                                                                                                                                                                                 밁
                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                  १
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 3.4%; Score 37.4; DB 3; Length 3489; Best Local Similarity 50.3%; Pred. No. 0.85; Matches 92; Conservative 0; Mismatches 91; Indels 0
                                                                                                                                                                              1029 CTCCTCGTCCTCATCTGTCTCCTGCTCCTCATCATCCTTATTGTCATTGTCATC 970
                                                                                                                                                                                                                      1003 GCCCTGGCTCTCTCGCTGCTTCTGCTCCTGCTGCACTGTTATCAAGGAGGTC 1062
                                                                                                                                                                                                                                                                                                                                                                    1149 CTCCTCGTCATCCTCGTCATCCTCCTCGTCATCCTCGTCATCCTCGTCATC 1090
                                                                                                                                      1063 CCT 1065
                                                                                                                                                                                                                                                                          1089 CTCCTCGTCATCCTCCTCGTCATCCTCCTCGTCATCCTCGTCATCCTCCTCGTCATC 1030
                                                                                            969
                                                                                                                                                                                                                                                                                                       943 ACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTA 1002
                                                                                                                                                                                                                                                                                                                                                                                                883 CTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACC 942
                                                                                            CTT 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

THIS PAGE BLANK (USPTO)

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       score greater than or equal to the score of the result bein and is derived by analysis of the total score distribution.
                       1090.8
1090.8
1090.8
1090.8
1090.8
1090.8
1090.8
1090.8
1090.8
1090.8
1090.8
1090.8
1090.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Published_Applications_NA_Main:*

1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*

2: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*

5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

7: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

10: /cgn2_6/ptodata/1/pubpna/US11_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              is the number of results predicted by chance to have a ater than or equal to the score of the result being printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
     US-09-970-076-1_COPY_104_1207
1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       December 17, 2005, 13:22:55 ; Search time 1015.43 Seconds (without alignments) 8990.628 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9793542 seqs, 4134689005 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                            1145
55440
55440
55440
55440
55440
116440
116640
116650
116650
116650
116650
116650
116650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BB
                       US-10-133-937-58
US-01-159-563-58
US-01-159-563-58
US-02-918-715-231
US-02-918-715-231
US-10-301-822-198
US-10-474-794-231
US-10-979-159-176
US-10-979-159-231
US-11-047-278-231
US-11-047-278-231
US-11-038-307-17
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-11-047-278-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
Sequence 1, Appli sequence 58, Appl sequence 58, Appl sequence 176, App sequence 198, App sequence 176, App sequence 176, App sequence 231, App sequence 231, App sequence 231, App sequence 17, Appl sequence 17, Appl sequence 17, Appl sequence 13, Appl sequence 13, Appl sequence 13, Appl sequence 15, Appl sequence 23, Appl sequence 9, Appli sequence 9, Appli sequence 9, Appli sequence 9, Appli sequence 9, Appli sequence 9, Appli sequence 9, Appli sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19, Appl sequence 19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Description
                                                                            멸
                                                                                                                                                                           므
                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                          므
                                                                                                                                                                                                                                                                                                                        ß
                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1
US-11-047-278-1
                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 1104; Best Local Similarity 100.0%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                            Matches 1104; Conservative
```

ALIGNMENTS

## ; IENGTH: 1414 ; TYPE: DNA ; ORGANISM: Homo sapiens ; PEATURE: ; NAME/KEY: CDS ; LOCATION: (104)..(1207) US-11-047-278-1 APPLICANT: Young, John A.T. APPLICANT: Bradley, Kenneth A. APPLICANT: Collier, Robert J. APPLICANT: Mogridge, Jeremy S. TITLE OF INVENTION: Anthrax Toxin Receptor FILE REFERENCE: 960296.97745 CURRENT APPLICATION NUMBER: US/11/047,278 CURRENT FILING DATE: 2005-01-31 PRIOR APPLICATION NUMBER: US/9/970,076 PRIOR APPLICATION NUMBER: 05/251,481 PRIOR FILING DATE: 2000-12-05 NUMBER OF SEQ. ID NOS: 10 Sequence 1, Application US/11047278 Publication No. US20050196407A1 GENERAL INFORMATION: SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1

240	GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG 240	181	₹
283	GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT 283	224	ğ
180	GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCGACTGGAAT 180	121	×
223	credrecrearcredescendeses de la constante de l	164	ğ
120	61 CTGGTGCTCATCTGCGCCGGGCAAGGGGAGGACGGAGGGAG	61	¥
163	ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT 163	104	Б
60	ATGGCCACGGCGGAGAGCCGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT 60	<b>1</b>	¥

<u>,,</u>

Mismatches

DB 10; 0;

Length 1414;

<u>.</u>

Gaps

ર્

ર્ક

밁

```
RESULT 2
US-10-133-937-58
US-10-133-937-58
; Sequence 58, Application US/1013997
; Publication No. US20030207278A1
; GENERAL INFORMATION:
    APPLICANT: Khan, Javed
    APPLICANT: Khan, Javed
    APPLICANT: Ringner, Markus
    APPLICANT: Peterson, Carsten
    APPLICANT: Meltzer, Paul
    APPLICANT: Meltzer, Paul

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ર્ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઈ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                   음 성 음 성
                                                                                                                                                                                                                                                                                                             음 성 음
                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                  유용
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                             음 성
                                                                                                                                   밁
                                                                                                                                                  Ś
                                                                                                                                                                              1124
                                                                                                                                    1184
                                                                                                                                                                                                   1021
                                                                                                                                                                                                                          1064
                                                                                                                                                                                                                                                                    1004
                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                              944
                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                         884
                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                   824
                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                            764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   284
                                                                                                                                   GAGAGTGAGGAAAATAAAATAAAA 1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAPATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGGCCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                              GTGAGAGGAAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                             CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                           TGGTTCTGGCCCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCCTGCCGAG
                                                                                                                                                                                                                         TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                         TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                     ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                    GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAGAGAGAGGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGAAGGATTTGAAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                              TGGTTCTGGCCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                          ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
   ANALYZING HIGH DIMENSIONAL DATA FOR CLASSIFYING,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          403
                                                                                                                                                                               1183
                                                                                                                                                                                                    1080
                                                                                                                                                                                                                          1123
                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                     1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                         960
                                                                                                                                                                                                                                                                                                               1003
                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                    883
                                                                                                                                                                                                                                                                                                                                                                                                                                              823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                         943
                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
```

```
; TITLE OF INVENTION: DIAGNOSING, PROGNOSTICATING, AND FITTLE OF INVENTION: OTHER BIOLOGICAL STATES; FILE REFERENCE: 11613.56US01; CURRENT APPLICATION NUMBER: US/10/133,937; CURRENT FILING DATE: 2002-11-04; NUMBER OF SEQ ID NOS: 99; SOFTWARE: Patentin version 3.1; SEQ ID NO 58; LENGTH: 1454; TYPE: DNA 1, ORGANISM: Homo Bapiens
US-10-133-937-58
                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                 밁
                                                                                                                                                       Ś
                                                                                                                                                                                    밁
                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                        뮰
                                                                                                                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
             ð
                                     문
                                                            δ
                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 1104; Conserv
                                                                                                                                                                                                           541
                                                                                                                                                                                                                                   624
                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                564
                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                               504
                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                            444
                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                        384
                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144
                                                                                          804
                                                                                                                199
                                                                                                                                        744
                                                                                                                                                               601
                   781
                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                                                                                       CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                        ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                    AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                          CATGAAGGATITGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                            CAPATICIGTICA AGGICCTAGA AGAACTICICA GAAAGTTICTGCICA GGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGTGCTCATCTGCGCCGGGCAAGGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGCCACGGCGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
         ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                             GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                         GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                          ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                    ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                               CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; ilarity 100.0%; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1104;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AND/OR PREDICTING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISEASES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                            863
                                                                                                                                                                                      743
                                                                                                                                                                                                             600
                                                                                                                                                                                                                                    683
                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                               563
                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                             503
                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                          443
                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               203
 983
                       840
                                             923
                                                                    780
                                                                                                                  720
                                                                                                                                        803
                                                                                                                                                               660
                                                                                                                                                                                                                                                                                   623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AND
```

```
APPLICANT: Khan, Javed
APPLICANT: Ringner, Markus
APPLICANT: Ringner, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Meltzer, Paul
ITLE OF INVENTION: SELECTIONS OF GENES AND METHODS OF USING THE SAME FOR
TITLE OF INVENTION: DIAGNOSIS AND FOR TARGETING THE THERAPY OF SELECT CANCERS
FILE REFERENCE: 11613.56US11
CURRENT APPLICATION NUMBER: US/10/159,563
CURRENT FILING DATE: 2002-12-09
PRIOR APPLICATION NUMBER: US 10/133,937
PRIOR FILING DATE: 2002-04-25
NUMBER OF SEQ ID NOS: 444
SOFTWARE: Patentin version 3.1
SEQ ID NO 58
LENGTH: 1454
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 3
US-10-159-563-58
US-10-159-563-58
; Sequence 58, Application US/10159563
; Publication No. US20040009154A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                         밁
                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                 ঠ
                  밁
                                            δ
                                                                             밁
                                                                                                     S
                                                                                                                                                                    á
                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-159-563-58
                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100
Matches 1104; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   841
                  444
                                               301
                                                                             384
                                                                                                            241
                                                                                                                                           324
                                                                                                                                                                         181
                                                                                                                                                                                                          264
                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                     204
                                                                                                                                                                                                                                                                                                                                     144
                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                 1 ATGGCCACGGCGGAGCCGGAGCCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAGTGAGGAAAATAAAATAAAA 1104
                                  CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                             GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                              GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                               GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                        GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                             CTGGTGCTCATCTGCGCCGGGCAAGGGGGAGGACGCAGGGAGGATGGGGGTTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTTCTGGCCCCTCTGCCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                  CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 1104;
100.0%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                   <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                 6,
                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      960
                                                 360
                                                                                                               300
                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                      120
                                                                                443
                                                                                                                                              383
                                                                                                                                                                            240
                                                                                                                                                                                                          323
                                                                                                                                                                                                                                                                      263
                                                                                                                                                                                                                                                                                                                                     203
                                                                                                                                                                                                                                                                                                                                                                    60
APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/09/918,715
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-02
PRIOR PILING DATE: 2000-08-11
PRIOR PILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                       RESULT 4
US-09-918-715-176
                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                       Sequence 176, Application US/09918715
Publication No. US20030017157A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATGGCCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                       GAGAGTGAGGAAAATAAAATAAAA
                                                                                                                                                                                                                                                                                                                                                                                    GAGAGTGAGGAAAATAAAATAAAA 1104
                                                                                                                                                                                                                                                                                                                                                                                                                  TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    recarectedecearedecerderearecterrectedeceradecerecterected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTTGTTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                        1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
```

```
밁
                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-918-715-176
                                                                                                                                                          밁
                                                                                                                                                                                 S
                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                 밁
                                                                        S
                                                                                                      밁
                                                                                                                            ð
                                                                                                                                                                                                               밁
                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 99.8
Matches 1092; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q ID NO 176
LENGTH: 5540
1044
                                                                                                                                                                                                                                                                                                                      684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 324
                       901
                                                  984
                                                                           841
                                                                                                       924
                                                                                                                                781
                                                                                                                                                           864
                                                                                                                                                                                      721
                                                                                                                                                                                                                804
                                                                                                                                                                                                                                         199
                                                                                                                                                                                                                                                                    744
                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                            624
                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                               564
                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGCCACGGCGAGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                                                                                                                               GTGAGAGGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                  ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                       AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAATCCGTCAAGGCCTAGAAGAACTCCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGTGCTCATCTGCGCCGGGCAAGGGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCCACGGCGAGCGGAGAGCCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                 TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                            GTGAGAGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                           TCAGAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGCCAGCGTCATTGCTTTGACTGATGGAGAAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGAAGGATTTGAAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
              GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                         ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                        ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                     GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                               GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                         AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                            TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                   TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1090.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ω
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  °;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
1103
                                                   1043
                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                         960
                                                                                                         983
                                                                                                                                   840
                                                                                                                                                            923
                                                                                                                                                                                      780
                                                                                                                                                                                                                863
                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                     803
                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                             683
                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

```
APPLICANT: Berd St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Bert Vogelstein
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/09/918,715
CURRENT FILING DATE: 2001.08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-12
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOFTMARE: FastSEQ for Windows Version 3.0
SEQ ID NO 231
LENGTH: 5540
TYPE: DNA
OPPLANTEM: Homo sabiens
                                                                                                           δ
                                                                                                                                                                δ
                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo US-09-918-715-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 5
US-09-918-715-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                              S
                                                                                   밁
                                                                                                                                          밁
                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                      뭐
                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 1092; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 231, Application US/09918715 Publication No. US20030017157A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
 421
                                                       361
                                                                                   444
                                                                                                              301
                                                                                                                                          384
                                                                                                                                                                    241
                                                                                                                                                                                                324
                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                      264
                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                               204
                                                                                                                                                                                                                                                                                                                                                                    144
                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                               GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                              CTGGTGCTCATCTGCGCCGGGCAAGGGGAGGAAGGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAGTGAGGAAAA
                                           CATGAAGGATITGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                            TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                              CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                    ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                    ATGGCCACGGCGAGAGCGCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                           CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                          GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGTTCTGGCCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                        98.8%; ilarity 99.8%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1094
                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1090.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                          2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PATTERNS
                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1020
                                                                                      503
                                                                                                                 360
                                                                                                                                             443
                                                                                                                                                                      300
                                                                                                                                                                                                   383
                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                         323
                                                                                                                                                                                                                                                                                                               263
                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                     203
                                                                                                                                                                                                                                                                                                                                                                                                 60
    480
                                                          420
```

á

S 밁 S 밁 Ś 8

```
RESULT 6
US-10-301-822-198
US-10-301-822-198

// Sequence 198, Application US/10301822

// Publication No. US20030148410A1

// GENERAL INFORMATION:

// APPLICANT: Millennium Pharmaceuticals, Inc.

// APPLICANT: Guillemette, Tracy L.

// APPLICANT: Schlegel, Robert

// APPLICANT: Schlegel, Robert

// APPLICANT: Monahan, John E.

// APPLICANT: Monahan, John E.

// APPLICANT: Thibodeau, Stephen N.

APPLICANT: Monahan, John E.

// APPLICANT: Thibodeau, Stephen N.

APPLICANT: Burgart, Lawrence J.

// TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND

// TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND

// TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND

// TITLE OF INVENTION: THERAPY OF COLON CANCER

// FILLE REFERENCE: MPMO1-029PZRNM

// CURRENT APPLICATION NUMBER: US 60/301,822

// CURRENT PILING DATE: 2002-11-21

// PRIOR APPLICATION NUMBER: US 60/361,978

// PRIOR FILING DATE: 2002-03-05

// PRIOR FILING DATE: 2002-05-20
                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1104
                                                                                                                                                                                                                                                                                                                                                                                                        1164
                                                                                                                                                                                                                                                                                                                                                                              1081
                                                                                                                                                                                                                                                                                                                                                                                                                                 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAATGACGGCTTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAGTGAGGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                     TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                      GAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                               1094
                                                                                                                                         PREVENTION,
                                                                                                                                                                                                                                                                                                                                                                                                                                 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                         1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; NUMBER OF SEQ ID NOS: 2:
; SOFTWARE: FastSEQ for W.
; SEQ ID NO 198
; LENGTH: 5540
; TYPE: DNA
; ORGANISM: Homo Sapiens
; PEATURE:
; NAME/KEY: CDS
; LOCATION: (144)...(183)
US-10-301-822-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ર્ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                          ð
                                                  밁
                                                                     S
                                                                                                   밁
                                                                                                                    δ
                                                                                                                                                  멼
                                                                                                                                                                         S
                                                                                                                                                                                                    밁
                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                     몽
                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 98.8%;
Best Local Similarity 99.8%;
Matches 1092; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                            841
                                                                                                    864
                                                                                                                                                     804
                                                                                                                                                                            661
                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                       684
                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                       624
                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                         564
                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                         504
                                                                                                                                                                                                                                                                                                                                                                                                                                                         444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 144
                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 ATGGCCACGGCGGAGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                         CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
             TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                 GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                   GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                     TCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                    ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                         CARATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GADATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                  ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                  ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                       TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                         ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1090.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                            563
                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                             503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                               900
                                                                              840
                                                                                                     923
                                                                                                                                                      863
                                                                                                                                                                                                         803
                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                          683
                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                           623
                                                      983
                                                                                                                                                                               720
                                                                                                                                                                                                                                                        743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
```

```
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOWHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00179
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2001-04-11
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/202,850
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
INUMBER OF SEQ ID NOS: 359
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 176
LENGTH: 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 7
US-10-474-794-176
; Sequence 176, Application US/10474794
; Publication No. US20040213793A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Homo
US-10-474-794-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
 S
                                 밁
                                                             á
                                                                                                   밁
                                                                                                                                 Ś
                                                                                                                                                                     밁
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 1092;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Carson-Walter, Eleanor APPLICANT: St. Croix, Brad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1044
                                                                                                   384
                                                                                                                                                                     324
                                                                                                                                                                                                   181
                                                                                                                                                                                                                                      264
                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                        204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       984
 361
                                 444
                                                                  301
                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                         144 ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                            1 ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                         GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                       GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTAGGAAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGAGTGAGGAAAA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCATCCTGGCCATCGCCCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGGCCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                 TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAACAGAGAA
                                 CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                       CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                    TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                     GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                        GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                        CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                      CTGGTGCTCATCTGCGCCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTCCAGCGCCTATCTTAAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                       98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1237
                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1090.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                          2
                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1043
                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                           203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         960
   420
                                  503
                                                                  360
                                                                                                   443
                                                                                                                                                                     383
                                                                                                                                                                                                     240
                                                                                                                                                                                                                                      323
                                                                                                                                                                                                                                                                                                        263
                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                          60
                                             APPLICANT: Carson-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: St. Croix, Brad
APPLICANT: St. Croix, Brad
APPLICANT: St. Croix, Brad
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
UNMBER OF SEQ ID NOS: 359
                                                                                                                                                                                                                                                                                                                        RESULT 8
US-10-474-794-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                  Sequence 231, Applic Publication No. US20 GENERAL INFORMATION:
                 SOFTWARE: FastSEQ for Windows Version SEQ ID NO 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGTGAGGAAAA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                            GAGAGTGAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGTTCTGGCCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             recarecregecareceerecrearecrerrecreerecraceeerecreerecres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCGABATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGATCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCCAGCGTCATTGCTTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                       Application US/10474794 o. US20040213793A1
                                                                                                                                                                                                                                                                                                                                                                                            1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          563
```

1223

1163

```
á
                                   밁
                                                                   á
                                                                                                      밁
                                                                                                                                  ş
                                                                                                                                                                        В
                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-474-794-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 1092;
                                   1044
                                                                                                                                                                             924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    384
 961
                                                                     901
                                                                                                        984
                                                                                                                                          841
                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                     864
                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                          804
                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                               744
                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ATGGCCACGGCGGAGACGCGAGAGCCCTCGGCATCCAGTGGCTCTCTTTTGGCCACT
                                                        ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAATGACGGCTTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAGACAGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTGCTCATCTGCGCCGGGCAAGGGGGGACGCAGGGATGGGGGTCCAGCCTGCTAC
TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG 1020
                                   GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                 TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                            ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                               ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                      GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                        TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                   GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                 GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1090.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>۷</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                   1103
                                                                                                      1043
                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            203
                                                                                                                                            900
                                                                                                                                                                             983
                                                                                                                                                                                                                                                     923
                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                          863
                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                               803
                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAI
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/10/979,159
CURRENT FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: US/09/910,715
PRIOR FILING DATE: 2001-08-01
PRIOR FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-01
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
PRIOR PILING DATE: 2000-04-11
                                                                 δ
                                                                                                      밁
                                                                                                                                 S
                                                                                                                                                                            ₽
                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-979-159-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 9
US-10-979-159-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 176, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 1092;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 98.8%;
Best Local Similarity 99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelste
APPLICANT: Kenneth Kinzl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1104
                                                                                                                                          301
                                                                                                                                                                               384
                                                                                                                                                                                                                                                     324
                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                            121 GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      144
 421 ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 ATGGCCACGGCGGAGAGCCGGAGAGCCCTCGGCATCCAGTGGCTCTCTTTGGCCACT
                                                        CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                        CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                  CAAATCCGTCAAGGCCTAGAAGAACTCCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                            GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                       GAAATCTATTACTTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                 CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGATGGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGATGGAGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCACGGCGAGCGGAGAGCCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAGTGAGGAAAA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTTCTGGCCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAGTGAGGAAGA 1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/10979159
o. US20050142138A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1090.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               몂
```

2; 9

Indels Length

0;

Gaps

0

120 203 60

480

563 420 503 360 443 300

383

```
RESULT 10
US-10-979-159-231

i Sequence 231, Application US/10979159

j Publication No. US20050142138A1

i GENERAL INFORMATION:

APPLICANT: Brad St. Croix

APPLICANT: Bert Vogelstein

APPLICANT: Kenneth Kinzler

ITITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS

FILE REFERENCE: 1107.00134

CURRENT APPLICATION NUMBER: US/10/979,159

CURRENT FILING DATE: 2001-08-01

PRIOR APPLICATION NUMBER: US/09/918,715

PRIOR PILING DATE: 2001-08-02

PRIOR PILING DATE: 2000-08-02

PRIOR PILING DATE: 2000-08-02

PRIOR APPLICATION NUMBER: 60/222,599

PRIOR APPLICATION NUMBER: 60/222,599

PRIOR PILING DATE: 2000-08-01

PRIOR APPLICATION NUMBER: 60/222,590

PRIOR FILING DATE: 2000-08-11

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR FILING DATE: 2000-04-11

NUMBER OF SEQ ID NOS: 358

SOFTWARE: FAST-SEQ for Windows Version 3.0

SEQ ID NO 231

LENGTH: 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                    1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                               GAGAGTGAGGAAAA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGAGAGGGAATATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTCTGG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 743
                                                                                                                                                                               δ
                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Homo sapiens US-10-979-159-231
                                                                    S
                                                                                                    밁
                                                                                                                             S
                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                              밁
                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 98.8%;
Best Local Similarity 99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 1092;
                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                       804
                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                  684
                                                                                                                                                                                                                                                                                                                                                                                                                                        624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                      961
                                                                                                       984
                                                                                                                                                           924
                                                                                                                                                                                       781
                                                                                                                                                                                                                  864
                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                            744
                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGTGCTCATCTGCGCCGGCCAAGGGGAGGAGGATGGGGGTCCAGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGTGCTCATCTGCGCCGGGCAAGGGGGAGGAAGGGAGGATGGGGGTTCCAGCCTGCTAC
     TCCATCCTGGCCATCGCCCTGCTGATCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                 GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACCACACTGTTCTGACGGT
                                                                                                       ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                  GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                     ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGATCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                          GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                  AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAGAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GANATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                               ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                  GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                        ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                            GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                  ANAGATTTCANTGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1090.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                        1020
                                                                                                         1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                   900
                                                                                                                                                              983
                                                                                                                                                                                          840
                                                                                                                                                                                                                     923
                                                                                                                                                                                                                                                                        863
                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                               803
                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                  743
                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                          683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

```
Sequence 5, Application US/11047278

Publication No. US20050196407A1

GENERAL INFORMATION:
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Mogridge, Jermy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745

CURRENT APPLICATION NUMBER: US/11/047,278

CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/9/970,076
PRIOR FILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR FILING DATE: 2000-12-05
NUMBER OF ESQ ID NOS: 10
SOFTWARE: PATENTIAL Ver. 2.1
SEQ ID NO 5
LENGTH: 5540
TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                 ર્
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; NAME/KEY: CDS
; LOCATION: (144)..(1835)
US-11-047-278-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
US-11-047-278-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                       á
                                                                                                                                                                                             밁
                                                                                                                                                                                                                       Ś
                  δ
                                                     밁
                                                                                    ş
                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Sim
Matches 1092;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1104
                                                                                                                                                            301
                                                                                                                                                                                                                                                                   324
                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                        264
                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                              204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    144
                                                                                                                         444
                                                                                                                                                                                             384
                                                                                                                                                                                                                                241
                      421
                                                         504
                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1080
                                                                                                                                                                                                                                                                                        GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG 240
                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTGCTCATCTGCGCCGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTAC 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGTGAGGAAAA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                             CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGAGACACTTACATG 360
                                                                                                                                                                                                                                                                     GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG 383
                                                                                                                                                                                                                                                                                                                                         GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGTGCTCATCTGCGCCGGGCAAGGGGGAGGGAGGATGGGGGGTCCAGCCTGCTAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAGTGAGGAAGA 1237
ACAGCCAGCGTCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                           CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG 420
                                                                                                                                                                                                                   TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA 300
                                                                                                                                                                                                                                                                                                                                                               GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                         CAMATCCGTCMAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                 TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98.8%;
ilarity 99.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1090.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ν
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                           323
                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     203
                                                                                                                                                                                                 443
                      480
                                                         563
                                                                                                                             503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                         SOFTWARE: FASTSEQ for Windows
SEQ ID NO 17
LENGTH: 1674
TYPE: DNA
ORGANISM: Homo sapiens
US-10-038-307-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 12
US-10-038-307-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                           Sequence 17, Application US/10038307 Publication No. US20030134786A1 GENERAL INFORMATION:
                                      Query Match 87.0%;
Best Local Similarity 99.8%;
Matches 962; Conservative
                                                                                                                                                                                                            APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: JUdith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7953-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541 AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901 GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACCACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               744 GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     684 AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 564 ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT 623
       1 ATGGCCACGGCGGAGCGCAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGAGAGGGGAGACTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAGTGAGGAAGA 1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAGTGAGGAAAA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rccarccreeccarceccrecrearccrerrccrecraecccreecrerrcree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACCACCACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                     Version
                                      Score 960.8; DB 6;
Pred. No. 5.2e-303;
0; Mismatches 2;
                                          Indels
                                                                         Length 1674;
                                          0
                                            Gaps
```

0

1163

1020

1080

1103

960 1043 900 983 840 923 780 863

720

803 660 743 683 540

```
RESULT 13
US-10-201-292-17
; Sequence 17, Application US/10201292
; Publication No. US20030144193A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                               961
                                                                                                                      913
                                                                                                                                          901
                                                                                                                                                                  853
                                                                                                                                                                                       841
                                                                                                                                                                                                             793
                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                       733
                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                   673
                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                             613
                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                         553
                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                   493
                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                  TCCA
                                                                                                                                                                                                            ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                             CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGTGCTCATCTGCGCCGGGCAAGGGGAGGACGCAGGGAGGATGGGGGTCCAGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACCACCACTGTTCTGACGGT
                                                                                                                                                                               TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                   GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                        GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                  TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                        GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAGAGAGGGAAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                    ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                        972
                                                                                                                                              960
                                                                                                                                                                  912
                                                                                                                                                                                        900
                                                                                                                                                                                                             852
                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                          792
                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                    732
                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                               672
                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                          612
                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                     552
                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; LENGTH: 1674
; TYPE: DNA
; ORGANISM: Homo s
US-10-201-292-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Co
FILE REFERENCE: 7853-253-999
CUURRENT APPLICATION NUMBER: US/10/201,292
CUURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 17
                                                                                                                             5
                                                                                                                                                                       S
                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                  뮍
                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         र्
                문
                                     Ş
                                                                 밁
                                                                                 S
                                                                                                                                                       밁
                                                                                                                                                                                           밁
                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 962; Conserv
                                                                                                                                                                                                                                                                                          373
                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                                                                                                                           193
                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                      733
                                          721
                                                                                        661
                                                                                                             613
                                                                                                                                  601
                                                                                                                                                         553
                                                                                                                                                                                                    493
                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                               433
                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                253
                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 r
                      GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                             GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCACGGCGGAGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                 ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                      CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                    CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                 CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                               ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                          CATGAAGGATTTGAAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
  ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     87.0%;
nilarity 99.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 960.8; DB 6;
Pred. No. 5.2e-303;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1674;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
    840
                                                                                                                672
                                                                                                                                     660
                                                                                                                                                          612
                                                                                                                                                                                600
                                                                                                                                                                                                      552
                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                492
                                                                                                                                                                                                                                                                                           432
                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                       372
                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                             252
                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            72
                          792
                                               780
                                                                    732
                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

음 성 음

ર્ક

유 밁 Ş

유 성

δ 밁 Ś

밁 S 8

밁 5 밁

Ś

유

岛 **ઇ** 

밁 ર્ Ś

밁

δ

밁

밁

δ

밁 S 밁 Ş 밁 ঠ 용

```
Sequence 13, Application US/10038307

Sequence 13, Application US/10038307

Publication No. US20030134786A1

APPLICANT: James B. ROTTWAN

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Lingin OZZAYNAK

APPLICANT: Lingin OZZAYNAK

APPLICANT: Judith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Com

FILE REFERENCE: 7853-253-999

CURRENT APPLICATION UMMBER: US/10/038,307

CURRENT FILING DATE: 2002-06-28

NUMBER OF SEQ ID NOS: 26

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 13

LENGTH: 1650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
US-10-038-307-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Homo
US-10-038-307-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 956; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  973
            421
                                       421
                                                                  361
                                                                                               361
                                                                                                                            301
                                                                                                                                                      301
                                                                                                                                                                                   241
                                                                                                                                                                                                              241
                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                        \mathbf{\mu}
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                             CTGGTGCTCATCTGCGCCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CANATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                             CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                          GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                     GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCACTGGAAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCACGGCGGAGAGCCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                         ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                 CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                    TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                            GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                    CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             86.3%;
99.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 952.4; DB 6;
Pred. No. 2.9e-300;
0; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Compositions and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1650;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                        480
                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             852
                                                                                                  420
                                                                                                                            360
                                                                                                                                                         360
                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                        60
               480
                                                                     420
                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                          RESULT 15
US-10-038-307-15
US-10-038-307-15
Sequence 15, Application US/10038307
Publication No. US20030134786A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Engin OZKAYNAK
APPLICANT: UJUITH J. HEALBY
TITLE OF INVENTION: Tango 197 and Tango 216 Con
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 15
LENGTH: 1650
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
밁
               S
                                                     밁
                                                                           ঠ
                                                                                                             밁
                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                      Query Match
Best Local Simi
Matches 956;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481 TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       961
121
                           121
                                                        61
                                                                                 61
                                                                                                                بر
                                                                                                                                           -
                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCGGAAT
                                                                                                                            ATGGCCACGGCGGAGGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGATCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGAGAGGGAAGATAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                          CTGGTGCTCATCTGCGCCGGGCAAGGGGAACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            にした
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTCCCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                        CTGGTGCTCATCTGCGCCGGGCAAGGGGAAGGCACGGAAGGATGGGGGTCCAGCCTGCTAC 120
 GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                      86.3%; ilarity 99.4%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     962
                                                                                                                                                                      Score 952.4; DB 6;
Pred. No. 2.9e-300;
0; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                               Compositions
                                                                                                                                                                                                   Length
                                                                                                                                                                           Indels
                                                                                                                                                                                                      1650;
                                                                                                                                                                         <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                      120
                                                                                                                   60
```

Ś 밁 8

맑 ક 밁 र् 밁 Ş 밁 5 밁 S 밁 á 밁

```
361
                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
961
               961
                                 901
                                                106
                                                                841
                                                                                 841
                                                                                                  781
                                                                                                                   781
                                                                                                                                   721
                                                                                                                                                  721
                                                                                                                                                                    661
                                                                                                                                                                                    661
                                                                                                                                                                                                     601
                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
5-5
                                GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                      CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                          CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                            TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAACACCGTTAATGATATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAACAACCTTTAATGATATTCTCCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAACAGAGAA
                                                                  TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                            ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                    ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                   ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTCTAT
                 962
                                                                                                                                   780
                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                   900
                                                                                   900
                                                                                                   840
                                                                                                                   840
                                                                                                                                                                      720
                                                                                                                                                                                                       660
                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                     780
                                                                                                                                                                                       720
```

문

Search completed: December 17, 2005, 18:47:14 Job time : 1019.43 secs

2 2 2 2 2 2 2

8 8 8 8

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
   ററ
                                               0000
                                                                                                                                                                                                                                                                                                                                       O
                                                                                                                                                                                                                                                                                                                                                                      n
                                                                                                                                                                                                                                                                                                                                                                                                                           ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               score greater than or equal to the score of the result bein and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                        .090
                                                                                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                    geq
eq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleic search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Published_Applications_NA_New:*

1: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

2: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

5: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*

7: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

8: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

10: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   length:
                                                                                                                                                                                                                                                                                                                                                                                                                         Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               is the number of results predicted by chance to have a ster than or equal to the score of the result being printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    December 17, 2005, 13:29:40 ; Search time 200.369 Seconds (without alignments) 2700.811 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4161431 seqs, 245089505 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-1_COPY_104_1207
1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Copyright
                    201
201
201
201
201
201
201
201
4000
4856
600
4856
153376
1449
918
1449
918
1449
918
                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                           B
              US-11-186-284-198
US-10-95-561-83675
US-10-995-561-83660
US-10-995-561-83674
US-10-995-561-83814
US-10-995-561-83674
US-10-995-561-83677
US-11-029-0037-
US-11-029-0037-
US-11-029-0037-
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
US-10-995-561-83658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gummaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mode1
Sequence 198, App
Sequence 25275, A
Sequence 83675, A
Sequence 83660, A
Sequence 83660, A
Sequence 83674, A
Sequence 83914, A
Sequence 83925, A
Sequence 83925, A
Sequence 83647, A
Sequence 83647, A
Sequence 13509, A
Sequence 21593, A
Sequence 43111, A
Sequence 43111, A
Sequence 5250, Appli
Sequence 5250, Appli
Sequence 561, App
Sequence 561, App
Sequence 1331, A
Sequence 70418, A
Sequence 70418, App
Sequence 70418, App
Sequence 70418, App
Sequence 70418, App
                                                                                                                                                                                                                                                                                                                                                                                                                           Description
```

ი	ი						ი	ი				ი			ი		O			ი	
45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	
30.6	30.6	30.6	30.6	30.8	30.8	30.8	31	31	31.6	31.8	31.8	32	32	32	32	32	32.2	32.4	32.6	32.8	
2.8 85682	2.8 16	2.8 137	2.8 11	2.8 35	_	2.8 17	2.8 187745	2.8		2.9 176503	2.9 3388	2.9 193363	2.9 155989	2.9 139054			2.9 18			3.0 154548	
82 7	1655 6	71 7	18 6	51 7	3505 7	1785 6	45 7	655 6	3040 6	03 7	88 6	63 7	89 7	54 7	3010 6	53 7	1841 6	1005 6	1838 6	48 7	
US-11-117-187-205	US-10-750-185-59355	US-11-102-240-27	US-10-750-185-54797	US-11-000-463-88	US-11-000-463-560	US-10-750-185-50775	US-11-121-086-83	US-10-750-185-29911	US-10-750-185-48628	US-11-121-086-53	US-10-750-185-34560	US-11-112-908-32	US-11-121-086-57	US-11-121-086-96	US-10-750-185-36112	US-11-126-468-25	US-10-750-185-55750	US-10-858-730-191	US-10-750-185-60565	US-11-121-086-33	
Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence		
205, App	59355, 7	27, App1	54797, 1	88, App	560, App	50775, A	83, App	29911, A	48628, A	53, App1	34560, A	32, App	57, App1		36112, A	25, App.	55750, A	191, App	60565,	33, App1	

ALIGNMENTS

## APPLICANT: MILLENDAUM: FIGALIMACE COLORS APPLICANT: Guillemette, Tracy L. APPLICANT: Guillemette, Tracy L. APPLICANT: Guillemette, Tracy L. APPLICANT: Kamatkar, Shubhangi APPLICANT: Kamatkar, Shubhangi APPLICANT: Wonahan, John E. APPLICANT: Wonahan, John E. APPLICANT: Hibodeau, Stephen N. APPLICANT: Hibodeau, Stephen N. APPLICANT: Burgart, Lawrence J. TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PRETITLE OF INVENTION: THERAPY OF COLON CANCER FILE REFERENCE: MPMO1-029P2RNM CURRENT FILING DATE: 2005-07-21 PRIOR APPLICATION NUMBER: US/10/301,822 PRIOR APPLICATION NUMBER: US/10/301,822 PRIOR APPLICATION NUMBER: US 60/339,971 PRIOR APPLICATION NUMBER: US 60/339,971 PRIOR APPLICATION NUMBER: US 60/339,971 PRIOR APPLICATION NUMBER: US 60/361,978 PRIOR APPLICATION NUMBER: US 60/361,978 PRIOR APPLICATION NUMBER: US 60/361,978 PRIOR APPLICATION NUMBER: US 60/361,978 PRIOR APPLICATION NUMBER: US 60/361,978 PRIOR FILING DATE: 2002-03-05 PRIOR APPLICATION NUMBER: US 60/361,978 PRIOR FILING DATE: 2002-05-20 NUMBER OF SEQ ID NOS: 228 SOFTWARE: FRESEEG for Windows Version 4.0 SEQ ID NO 198 INSIGHT SEASON Ś RESULT 1 US-11-186-284-198 US-11-186-284-198 Sequence 198, Application US/11186284 Publication No. US20050266493A1 GRNERAL INFORMATION: APPLICANT: Millennium Pharmaceuticals, APPLICANT: Berger, Allison LENGTH: 5540 TYPE: DNA ORGANISM: Homo Sapiens FEATURE: NAME/KEY: CDS LOCATION: (144)...(1838) Matches 1092; Query Match Best Local ( 1 ATGGCCACGGGGGGGGGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTTTTGGCCACT 60 Similarity ATGGCCACGGCGAGAGCCCTCGGCATCCAGTGGCTCTCTTTGGCCACT 203 Application US/11186284 5. US20050266493A1 Conservative 98.8**%**; ; Score 1090.8; Pred. No. 0; O; Mismatches B 2; 7; Length 5540 PREVENTION, 0, Gaps 0

밁

```
1104
                                                                                                                                                                                   1044
                                                                                                                                                196
                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                             984
                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                     924
                                                                                                                                                                                                                                                                                                                                                                                                                864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                   TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                              CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
GAGAGTGAGGAAAA 1094
                                                          TGGTTCTGGCCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1080
                                                                                                                              TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                     GATGGCCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT 1103
                                                                                                                                                                                                          GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                               TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                     ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                               ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGTTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAGACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCGGATTTGACCTGTACTTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGTGCTCATCTGCGCCGGGCAAGGGAAGGAAGGATGGGGGTCCAGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                               TCCATCCTGGCCATCGCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                               1043
                                       1223
                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                       983
                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                923
                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            743
```

유성

음 성 음 성

성 유

밁

성 음 성

ફ

밁

유

Ś

음 성 음

밁

음 성

δ

유 성 유

8 8 8 8 8 8

```
RESULT 3
US-10-995-561-83675
; Sequence 83675, Application US/10995561
; Publication No. US20050272054A1
; Publication No. US20050272054A1
; GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: CENDIOVASCULAR DISORDERS AND DRUG RESPONSE, METHODS OF TITLE OF INVENTION: DETECTION AND USES THEREOF
; TITLE OF INVENTION: DETECTION AND USES THEREOF
; PILE REFERENCE: CL001559
; CURRENT APPLICATION NUMBER: US/10/995,561
; CURRENT FILING DATE: 2004-11-24
; NUMBER OF SEQ ID NOS: 85702
; SOFTWARE: FeatSEQ for Windows Version 4.0
; ED ID NO 83675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: MMI GENOMICS, INC.
APPLICANT: DENISE, Sue K.
APPLICANT: KERR, Richard
APPLICANT: KERR, Richard
APPLICANT: KERR, Richard
APPLICANT: HOLM, Tom
APPLICANT: HOLM, Tom
APPLICANT: BATES, Stephen
APPLICANT: BATES, Stephen
APPLICANT: PANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
FILE REFERENCE: MMI11100-2
CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT APPLICATION NUMBER: US/6/437,482
PRIOR APPLICATION NUMBER: US/6/437,482
PRIOR APPLICATION NUMBER: US/03-12-31
PRIOR APPLICATION NUMBER: US/03-12-31
PRIOR APPLICATION NUMBER: US/03-12-31
PRIOR APPLICATION NUMBER: US/03-12-31
PRIOR FILING DATE: 2002-12-31
SOPTWARE: Patentin version 3.1
SEQ ID NO 25275
LENGTH: 2765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: DNA; GOVING ; ORGANISM: Bovine US-10-750-185-25275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 2
US-10-750-185-25275/c
US-10-750-185-25275, Application US/10750185
Publication No. US20050260603A1
GENERAL INFORMATION:
                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                      밁
                                                                                                                               Ś
                                                                                                                                                                                                                                                                           ; TYPE: DNA; Homo sapiens; ORGANISM: Homo sapiens US-10-995-561-83675
유
                                                                                                                                                                                Query Match
Best Local Sim:
Matches 55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 5.6%; Score 61.4; DB 6; Best Local Similarity 77.9%; Pred. No. 1.9e-09; Matches 74; Conservative 0; Mismatches 21
                                                                                                                                                                                                     Match 3.3%;
Local Similarity 62.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          630 CATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCAC
                                                                                                                 928 GTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  211 CCTCTCCTCCTAGATATTGAAGAAATCCTGCATCGAAATTCTAGCAGCTGAACCATCCAC
129
                            CIGITCCIGCICCIAGCCCIGGCICTCC 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGA 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATATGTGCAGGAGGTAAATTGAAACTAAGTGTTA
CTGCACCAGCCCGTGGTCCTCACTGACC
                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19866881163262
                                                                                                                                                                             Score 36.4; DB
Pred. No. 0.059;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 6;
                                                                                                                                                                                                                           DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    117
                                                                                                                                                                                    32;
                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 2765;
                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                  201;
                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                         987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ę,
```

US-10-131-826A-423/c

Sequence 423, Application US/10131826A Publication No. US20050245730A1 GENERAL INFORMATION:

APPLICANT: Baker, Kevin

```
밁
                                                                                                                                                                                     ફ
                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA; ORGANISM: Homo Sapien US-10-131-826A-423
RESULT 5
US-10-995-561-83660
                                                                            8
                                                                                                             श
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
                                                                                                                                                                                                                                                                                                                                                                                                                                          Remaining Prior Ap
NUMBER OF SEQ ID N
SEQ ID NO 423
EENGTH: 2368
                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/059263 PRIOR FILING DATE: 1997-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3330R1C128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/059352
                                                                                                                                                                                                                                                                                                        y Match 3.2%;
Local Similarity 50.6%;
hes 86; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/059122 FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/059117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/059184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1997-09-17
                                                                                                                                                                                                                                  1002
                                                                                                               1004 cccreecrerecreerecreecececrerecreececrerexitate
                                                                                                                                                       942
                                                                                                                                                                                                                                                                      884
                                                                                                                                                                                         944 CACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGATCCTGTTCCTGCTCCTAG 1003
                                                                                                                                                                                                                                  TCCACACCAGCAGCCAAGTTGTCCTCCTCCTCTTCTTCCTCTGCTTCATCCTCATCGCCA
                                                                                                                                                                                                                                                                  TCCAGGTCAGCATGAACGATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCA 943
                                                                                                                                                       AGATCTTCTTTCTTCTTCATCATCTACAAGGCTGTCTTTGTTTTCTTCTTCATTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Watanabe, Colin K
Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Goddard, Audrey
Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gurney, Austin L. Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DeForge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application data removed - See File Wrapper or PALM. NOS: 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/059588
                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                           Score 35.6; DB 6;
Pred. No. 0.54;
                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                            84;
                                                                                                                                                                                                                                                                                                                                               Length 2368;
                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                  943
```

```
RESULT 6
US-10-995-561-83669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                              RESULT 7
US-10-995-561-83674
                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-995-561-83660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-995-561-83669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 83669, Application US/10995561

Publication No. US2050272054A1

GENERAL INFORMATION:

APPLICANT: CARGILL, Michele et al.

APPLICANT: CARGILL, Michele et al.

TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH

TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONSE, METHODS

TITLE OF INVENTION: DETECTION AND USES THEREOF

FILE REPERENCE: CL001559

CURRENT APPLICATION NUMBER: US/10/995,561

CURRENT FILING DATE: 2004-11-24
Sequence 83674, Application US/10995561
publication No. US20050272054A1
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RES
TITLE OF INVENTION: DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONSE, METHODS OF
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CL001559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 83660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 83660, Application US/10995561 Publication No. US20050272054A1
                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 83669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 201
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH: 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                928 GTCATCATCACCACCACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATC 987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         104 CTGCACCAGCCCGTGGTCCTCACTGACC 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               988 CTGTTCCTGCTCCTAGCCCTGGCTCTCC 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               928 GTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATC 987
                                                                                                                                                                                                                                                                     988 CTGTTCCTGCTCCTAGCCCTGGCTCTCC 1015
                                                                                                                                                                                                                                89
                                                                                                                                                                                                                                                                                                              29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.2%;
Similarity 62.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                   h 3.2%;
Similarity 62.5%;
                                                                                                                                                                                                                                                                                                              CTGCACCAGCCCRTGGTCCTCACTGACC 116
                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                   Score 35.2; DB Pred. No. 0.15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 35.2; DB Pred. No. 0.15; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             υ
3
                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                         RESPONSE, METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                  <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

```
; FILE REFERENCE: CL001559
; CURRENT APPLICATION NUMBER: US/10/995,561
; CURRENT FILING DATE: 2004.11-24
; NUMBER OF SEQ ID NOS: 85702
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 83674
; LENGTH: 201
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-995-561-83674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 83814, Application US/10995561

| Sequence 83814, Application US/10995561
| Publication No. US20050272054A1
| GENERAL INFORMATION: US20050272054A1
| TITLE OF INVENTION: MICHOLE et al.
| TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONTITLE OF INVENTION: DETECTION AND USES THEREOF
| TITLE OF INVENTION: DETECTION AND USES THEREOF
| TITLE OF INVENTION USES THEREOF
| CURRENT APPLICATION NUMBER: US/10/995,561
| CURRENT APPLICATION NUMBER: US/10/995,561
| CURRENT APPLICATION NUMBER: US/10/995,561
| UNMBER OF SEQ ID NOS: 85702
| SOFTWARE: FastSEQ for Windows Version 4.0
| SEQ ID NO 83814
| LENGTH: 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                            RESULT 9
US-10-995-561-83925
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-995-561-83814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-995-561-83814
Sequence 83925, Application US/10995561

Publication No. US20050272054A1

GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONSE, METHODS
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CL001559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 83925
LENGTH: 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                         886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                928 GTCATCATCACCACCACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          928 GTCATCATCACCACACACACTGTTCTGACGGTTCCATCCTGGCCCATCGCCCTGCTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        139
                                                                                                                                                                                                                                                                                                                                                                                103 CTGCACCAGCCCGTGGTCCTCACTGACC 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  55,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       h 3.2%;
Similarity 62.5%;
55; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                crerrecrecraecerecrec 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCATCATCCCCAGCACGTACGWCCCGGGCACCACCAACCACGACATCGCGCTGCTCCGC 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGCACCAGCCCGTGGTCCTCACTGACC 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              crerrecrecraecerecrecree 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 35.2; DB Pred. No. 0.15; O; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 35.2; DB
Pred. No. 0.15;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         33,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6; Length 201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESPONSE, METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 얶
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

```
APPLICANT: MEZO, ADAM R.

APPLICANT: MEZO, ADAM R.

APPLICANT: RIVERA, DANIEL S.

APPLICANT: RIVERA, DANIEL S.

APPLICANT: BITONTI, ALAN J.

APPLICANT: STATTEL, JAMES

TITLE OF INVENTION: IMMUNOGLOBULIN CHIMERIC MONOMER-DIMER HYBRIDS

FILE REFERENCE: 08945.0007-01000

CURRENT APPLICATION NUMBER: US/11/029,003

CURRENT APPLICATION NUMBER: 60/539,207

PRIOR APPLICATION NUMBER: 60/487,964

PRIOR APPLICATION NUMBER: 60/487,964

PRIOR APPLICATION NUMBER: 60/487,964

PRIOR APPLICATION NUMBER: 60/489,600

PRIOR APPLICATION NUMBER: 60/489,600

PRIOR APPLICATION NUMBER: 60/489,600

PRIOR FILING DATE: 2003-05-06

NUMBER OF SEQ ID NOS: 91

SOCTWARE: Patentin Ver. 3.2

SEQ ID NO 7

TENCATU- 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-995-561-83925
                                                                                                                                                                                                 RESULT 11
US-10-995-561-83647
                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 10
US-11-029-003-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-11-029-003-7
Sequence 83647, Application US/10995561
publication No. US20050272054A1
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RES
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CL001559
CURRENT APPLICATION UMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 62.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 3.2%;
Best Local Similarity 62.5%;
Matches 55; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 7, Application US/11029003 Publication No. US20050260194A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 2016
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  928 GTCATCATCACCACCACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATC
                                                                                                                                                                                                                                                                                                                 crerrecrecraececreecrere 1015
                                                                                                                                                                                                                                                                                                                                                          GTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGCACCAGCCCGTGGTCCTCACTGACC 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    crerrecrecraecerescrere 1015
                                                                                                                                                                                                                                                                              CTGCACCAGCCCGTGGTCCTCACTGACC 883
                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 35.2; DB Pred. No. 0.15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 35.2;
Pred. No. 0
                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6
                                                                                                                                                                                                                                                                                                                                                                                                                                       33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 2016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                 RESPONSE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                   METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    987
                                                                                   ဝှု
```

```
В
                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-995-561-83658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 12
US-10-995-561-83658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-995-561-83647
                                                                                                                                                                                                                                                                                                                      US-10-995-561-13509
                                   Sequence 13509, Application US/10995561

Publication No. US20050272054A1

GENERAL INFORMATION:
APPLICANT: CARCILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONSE, METHODS
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILLE REFERENCE: CL001559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT APPLICATION UMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FASESEQ for Windows Version 4.0
SEQ ID NO 13509
LENGTH: 40000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CROITOL POLYMORERS AND DRUG RESPONSE, METHODS OF
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CLOO1559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 83658
LENGTH: 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 83658, Application US/10995561
Publication No. US20050272054A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.2%;
Best Local Similarity 61.4%;
Matches 54; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 83647
LENGTH: 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local !
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match 3.2%;
Local Similarity 61.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      112
                                                                                                                                                                                                                                                                                                                                                                                                     113
                                                                                                                                                                                                                                                                                                                                                                                                                                           886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       928 GTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATC 987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      928 GTCATCATCACCACCACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         crerrecrecraecerecrecree 1015
                                                                                                                                                                                                                                                                                                                                                                                                     CTGCACCAGCCCGTGGTCCTCACTGACC 140
                                                                                                                                                                                                                                                                                                                                                                                                                                           crerrecrecraecerrecrere 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCACCAGCCCGTGGTCCTCACTGACC 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 34.8; DB Pred. No. 0.2; 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 34.8; DB 6;
Pred. No. 0.2;
1; Mismatches 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 33,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

APPLICANT:

KERR, Richard ROSENFELD, David HOLM, Tom BATES, Stephen FANTIN, Dennis

```
APPLICANT: DeNISE, Sue K.

APPLICANT: KERR, Richard
APPLICANT: KERR, Richard
APPLICANT: HOLM, Tom
APPLICANT: HOLM, Tom
APPLICANT: BATES, Stephen
APPLICANT: BATES, Stephen
APPLICANT: PANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
FILE REFERENCE: MMI1100-2
CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR FILING DATE: 2002-12-31
NUMBER OF SEG ID NOS: 64922
SEG ID NOS: 64922
SEG ID NOS: 64922
SEG ID NOS: 64922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; NAME/KEY: misc_feature
; LCCATION: (1)...(4000)
; OTHER INFORMATION: n = A,T,C
US-10-995-561-13509
                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: DNA
; ORGANISM: Bovine
US-10-750-185-21593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                      RESULT 15
US-10-750-185-43111
                                                                                                                                                                                                                                                                                              뭐
                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-750-185-21593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
Sequence 43111, Application US/10750185
Publication No. US20050260603A1
GENERAL INFORMATION:
APPLICANT: MMI GENOMICS, INC.
APPLICANT: DENISE, Sue K.
APPLICANT: EERR, Richard
APPLICANT: ROSENFELD, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 21593
LENGTH: 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21593, Application US/10750185 Publication No. US20050260603A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 3.2%;
Best Local Similarity 59.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: MMI GENOMICS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match 3.1%;
Local Similarity 48.6%;
                                                                                                                                                                                                                     518
                                                                                                                                                                                                                                                       315
                                                                                                                                                                                                                                                                                                                        255 CTCCACCCGAGGAACCAACCTTAATGAAACTGACAGAAGAGACAGAGAAAACCGTCAAGG 314
                                                                                                                                                                                                                                                                                                                                                                           398 TATGGTTCATTTTCTCAGGATCTCTTCATTYGAAATTACAAGTGGTGAGGGGAACAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                195 TGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTT 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     928 GTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATC 987
                                                                                                                                                                                                                                                                                                                                                                                                                                                        85;
                                                                                                                                                                                                                                                       CTGCACCAGCCCRTGGTCCTCACTGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          crerrecrecraecerecree 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCATCATCCCCAGCACGTACGWCCCGGGCACYACCAACCACVACATCRYGCTGCTCYRC
                                                                                                                                                                                                                     CCTGAAGGACAGCTAGACAACTCTGAAAAGGGGAGAGACTRACTTGAAGGTCAGA 572
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MMBT10290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 34.8; DB
Pred. No. 6.4;
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 34.6; DB Pred. No. 0.47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or insertion/deletion polymorphism (see Tables 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6
                                                                                                                                                                                                                                                                                                                                                                                                                                                        87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 40000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                           457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
```

```
FILE REFERENCE: MMILLOO-2

CURRENT APPLICATION NUMBER: US/10/750,185

CURRENT APPLICATION NUMBER: US/10/750,185

CURRENT FILING DATE: 2003-12-31

PRIOR APPLICATION NUMBER: US 60/437,482

PRIOR FILING DATE: 2002-12-31

NUMBER OF SEQ ID NOS: 64922

SOFTWARE: PALENTIN VERSION 3.1

SEQ ID NO 43111

LENGTH: 4856

TYPE: DNA

ORGANISM: Bovine 19866880415951

US-10-750-185-43111
Search completed: December 17, 2005, 18:54:55 Job time: 203.369 secs
                                                                                                                               Ş
                                                                                                                                                                                         망
                                                                                                                                                                                                                                     ફ
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                               Query Match 3.1%; Score 34.6; DB 6; Length 4856; Best Local Similarity 50.3%; Pred. No. 1.9; Matches 85; Conservative 0; Mismatches 84; Indels 0
                                                                                                                                                                                              3767 CACATGGTCTCCGTCTCCATGATCACCCTCGTGCTGCCCATCCTCATCTTCCTCTGATCC 3826
                                                                                             3827 ATGCTGTCCATCCCCTGGCCCAGCAGGCACTTCTGGATGATGGCCATCA 3875
                                                                                                                                  1006 CTGGCTCTCTGGTGGTTCTGGCCCCTCTGCACTGTGATTATCA 1054
                                                                                                                                                                                                                                                                                                 3707 CTGTACAACATGCTGGTGGCCCGTTCCAAGATGGTGTGCTACTTTCTCATCATCCTCAAC 3766
                                                                                                                                                                                                                                          946 CACTGITCTGACGGITCCATCCTGGCCATCGCCCTGATCCTGTTCCTGCTCCTAGCC 1005
                                                                                                                                                                                                                                                                                                                                              886 CAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACA 945
                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
```

```
Command line parameters:

-MODEL-frame+ n2p.model -DEV=xlp
-MODEL-frame+ n2p.model -DEV=xlp
-Q-/cgn2 1/USFTO_gpool_p/US09970076/runat_14122005_110510_26550/app_query.fasta_1.2894
-DB=Isued_Patents_AA -QFMT=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=51ts -START=1 -END=1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=ptc -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=ptc -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000
-USER-US09970076 @CGN 1 1.119 @runat 14122005 110510 26550 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQÜERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TINEOUT=120 -MARN_TINEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-DEV_TINEOUT=120 -MARN_TINEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
                                                                                                                                                                                                                   Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database :
                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                   Score
                                                                                                                                                                                   962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             seg length: 0
seg length: 2000000000
                                                                                                                                                  166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein search, (using frame_plus_n2p model)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    December 14, 2005, 11:21:18 ; Search time 36.3908 Seconds (without alignments) 5016.322 Million cell updates/sec
                                                                                                                                                                                                                   Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-1_COPY_104_1207
2003
                                                                                                                                                                                                                                                                                                                                                                  Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/iaa/5_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/6_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/H_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/RE_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               572060 seqs, 82675679 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
 atggccacggcggagcggag.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                   Length
 B
US-10-104-047-2639

US-08-286-889-46

US-08-485-618-46

US-08-655-672-46

US-08-605-672-46

US-08-943-363-46

US-08-913-043-46

US-09-193-043-46

US-09-688-307A-46

US-09-350-259-46

US-09-350-259-46

US-08-362-652-53
                                                                                                                                                                                                                     占
                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7.05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .gtgaggaaaataaaataaaa 1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1144120
                                                                                                                                                                                                                     Description
               Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                    Sequence
                                                                                                                                                  Sequence
                                                                                                                                                                                   Sequence
2639, Ap
46, Appl
46, Appl
46, Appl
46, Appl
46, Appl
46, Appl
46, Appl
46, Appl
46, Appl
46, Appl
53, Appl
53, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REST
                                                                                                                                                  Ali
Pre
Sco
Per
Bes
Que
DB:
                   S
                                                    밁
                                                                                ঠ
                                                                                                                                                                                                                                                                                       us-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ប្រក្ខ័
```

70	10	ignment Score ad. No.: ore: ccent Simila. st Local Sim ary Match:	10-104-047-2639 10-104-047-2639 1equence 2639, Applicati atent No. 6943241 APPLICANT: HELIX RESEAR TITLE OF INVENTION: No. FILE REFERENCE: H1-A010 CURRENT APPLICATION NUM CURRENT FILING DATE: PRIOR APPLICATION NUMBE PRIOR FILING DATE: PRIOR FILING DATE: NUMBER OF SEQ ID NOS: 48 SOFTWARE: PATENTIN Ver. SEQ ID NO 2639 LENGTH: 488 TYPE: PRT ORGANISM: Homo sapiens ORGANISM: Homo sapiens		13 166 114 115 116 117 118 119 119 119 119 119 119 119
ATCTGCGCCGGG	-1_COPY_104_1 GCGGAGCGGAGA           AlaGluArgSer	res: arity: milarity:	2639 39, Applicat 994324 194324 RMATION: HELIX RESEA VENTION: NO ENCE: H1-A01 ELICATION NU ELICA		
GGCAAG	_1207 .GAGCC	. 913 . 913	On CH BER 8: 002		11161 11161 11161 11161 11161 11161 11161 11161 11161 11161 11161 11161 11161 11161 11161 11161 11161 11161 11161
8	CTC	, 6 , 8, 8, 0, 1	US/: INS: 1432: 1-03:		4448884444488844444444444444
GGAcGC	207 (1-1104) x 0 GCCCTCGGCATCGGCT ProAlaArgSerProG		/10104047 STITUTE 241el full l US/10/104,04 3-25	ALIGNMENT	US-08-605 US-09-93 US-09-93 US-09-193 US-09-350 US-08-485 US-08-943 US-08-943 US-09-193
agggaggatggggt 	TTCCAGTGGCTC	th: hes: ervative atches: ls:	length cDNA	ENTS	-672-53 -043-53 -043-53 -043-53 -043-53 -043-53 -052-2
GGTCCA	TCTT	488 190 63 106 7			
GCCTGCTACGGCGGA 1	GCCACTCTGGTGCTC 6 :::    GlyLeuTrpLeuLeu 2				Sequence 53, Appl Sequence 53, Appl Sequence 53, Appl Sequence 53, Appl Sequence 53, Appl Sequence 37, Appl Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 55, Appli
26	νφ				

Subunit

```
RESULT 2
US-08-286-889-46
Sequence 46,
                                                                                                                                                                                  1027
                                                                                                                                              341
                                                                                                                                                                                                                   321 AlaIleIleValIleLeuValLeuLeuLeuLeuGlyIleGlyLeuMetTrpTrpPhe
                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                             907
                                                                                                                                                                                                                                                                                                                                                                281
                                                                                                                                                                                                                                                                                                                                                                                               847
                                                                                                                                                                                                                                                                                                                                                                                                                                     261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     247
                                                                        361 LysGluGluGluGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23
                                                                                                                                                                                                                                                                                                                                                                                                                                   GluThrTyrThrThrSerValLysProValSerValGlnLeuAsnSerMetLeuCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |||:::||||||||||||||||||||||||:::||||
SerIleIleIleAlaLeuThrAspGlyLysLeuAspGlyLeuValProSerTyrAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TyrasnPheValGlnGlnLeuAlaGluArgPheValSerProGluMetArgLeuSerPhe
                                                                                                                                                                                                                                                                                         LysSerValileSerGlySerLeuIleValThrAlaThrGluCysSerAsnGlyIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlyLeuLysLeuAlaAsnGluGlnlle-----GlnLysAlaGlyGlyLeuLysThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGAAGACAGAGAACAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATC
                                                                                                                                                                                                                                                                                                                                                                                               GCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlyArgGlyPheMetLeuGlySerArgAsnGlySerValLeuCysThrTyrThrValAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTCTAGCAGCTGAACCATCCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysGluAlaLysIleSerArgSerLeuGlyAlaSerValTyrCysValGlyValLeuAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleValPheSerSerGlnAlaThrIleIleLeuProLeuThrGlyAspArgGlyLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCGCGCACCACTGGAATGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ValLeuSerGlyProGlyGlyLeuLeuArgAlaGlnGluGlnProSerCysArgArgAla
                                                                                                                                              TrpProLeuCysCysLysValValIleLysAspProProProProProAlaProAlaPro
                                                                                                                                                                                                                                                      AlaProIleLeuAsnLysAlaGlyGluThrLeuAspValSerValSerPheAsnGlyGly
   Application US/08286889
                                                                                                           - GAGGAGAGTGAGGAA 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ::
                                                                          366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62
                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                   906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42
                                                                                                                                                                                                                                                                                                                                                                                                                                     280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
CURRENT APPLICATION NUMBER: US/08/286,889
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION: 435
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: P38,659
REFERENCE/DOCKET NUMBER: 27866/321(
TELECOMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
FILEX: 25-3856
INFORMATION FOR SEG ID NO: 46:
SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amino acids
TYDE: amino acids
                                                                                         Ş
                                                                                                                            당
                                                                                                                                                             Ś
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-1_COPY_104_1207 (1-1104) x US-08-286-889-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-286-889-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Marshall, O'Toole, Gerstein, Mur
STREET: 233 South Wacker Drive, 6300 Sear T
CITY: Chicago
STATE: Illinois
COUNTRY: United States
ZIP: 60606-6402
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No. 5470953
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gallatin, W. Mich
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5470953el Human
NUMBER OF SEQUENCES: 51
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: 1i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            No:
                                                                                                                                                                                                                                                                                                                                        184
                                                                                                                                                                                                                                                                       166 ---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
                                                                                                                                                                                                                                                                                                                                                                CCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG
                        CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG
                                                                                          CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAG
                                                                                                                      PheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAlaIleValGlnLeu
                                                                                                                                                               CTGACAGAAGACAGA-----GAACAAATCCGTCAAGGCCTAGAAGAACTC
                                                                                                                                                                                                    SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr
                                                                                                                                                                                                                                     AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.9e-09
166.00
46.15%
28.21%
8.29%
                                                           -----GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27866/32168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #1.25
```

밁 Ś Ś 밁 Ś

밁

5 В S

밁

δ 밁

밁

밁 5 밁

δ

Ś

밁 S 당 ঠ 망 Ş

밁 á 밁

문 Ş

Ś 밁

444

387

238

327 200

223

183 222 163 165

밁 Ś

Db

ફ

ঠ 맑 ş 밁 १ 밁 Ş 밁

ş 밁

밁

```
RESULT 3
US-08-485-618-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 46, Application US/08485618 Patent No. 5728533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:

APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5728533el Human 2 Integrin
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & I
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                               TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                   NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
TELECOMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 08/173,497 FILING DATE: 23-DEC-1993 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 60606-6402
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
TOPOLOGY:
                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        316 LysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIleGlnGluLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           351 GluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGTGAAAGAT---TTCAATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIleLeuIleValIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu
               : 1155 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 United States
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lePheAlaIleGluGlyThrGluSerArgSerSerSerSerPheGlnHis 350
                                                                                                                                                                                                                                                                                                         US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/485,618
                                                                     46:
                                                                                                                                                              27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-1_COPY_104_1207 (1-1104) x US-08-485-618-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-485-618-46
                                                                                                                                                                                 RESULT 4
US-08-362-652-46
                                                                                                                                                                                                                                         뭉
                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment
                                                                 Patent No. 5766850
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 57668850el
                                                                                                                                                                Sequence 46, Application US/08362652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
 CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray of STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Х
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           316
                                                                                                                                                                                                                                                                                                                                                                                                                        865
                                                                                                                                                                                                                                                                                                                                                                                                                                                          296 ProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGlnAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         445 ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         239 GluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIleLeuIleVallle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 388 CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      328 САБАЛАБТТСТБССАББАББАБАСАСТТАСАТБСАТБЛАББАТТТБЛАДЕВСССАБТБАБ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            204 PheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAlaIleValGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       164 AspGlnSerAspPheThrGlnMetLysAspPheVaiLysAlaLeuMetGlyGlnLeuAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               109 CCAGCCTGCTACGGC---GGATTTGACCTGTACTTTGGACAAATCAGGAAGTGTG
                                                                                                                                                                                                                                       351 GluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                                                                                                                                 LysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIleGlnGluLys---
                                                                                                                                                                                                                                                                                                                                                                                                                  CCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ---ACACAGCTGGCCCGGATT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysAla------GlyIleIleArgTyrAlaIleGlyValGlyAspAlaPheArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThraspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gln------GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGACAGAAGACAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
                                                                                                                                                                                                                                                                         GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC 759
                                                                                                                                                                                                                                                                                                                                               TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein
                                                                                                                                                                                                                                                                                                               IlePheAlaIleGluGlyThrGluSerArgSerSerSerSerPheGlnHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2.9e-09
166.00
46.15%
28.21%
8.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
                                                                           Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -GAACAAATCCGTCAAGGCCTAGAAGAACTC
                                                                           2 Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -GCGGACAGTAAGGATCATGTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11155
42
96
30
                      א
                                                                                                                                                                                                                                           364
                                                                           Alpha Subunit
```

278 498

295 555 444

258

387

223 327 203

238

282 183 222 163 165

350

Chicago

Illinois

United States

```
δ
                                                                                 밁
                                                                                                                                                                                           ş
                                                                                                                                                                                                                                     吊
                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity:
Query Match:
                                                                                                                  á
                                                                                                                                                           밁
                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-1_COPY_104_1207 (1-1104) x US-08-362-652-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-362-652-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 60606-6402

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                      388
                                                                                                                                                                                                328
                                                                                                                                                                                                                                                                        283
                                                                                                                                                                                                                                                                                                               184
                                                                                                                                                                                                                                                                                                                                                  223
                                                                                                                                                                                                                                                                                                                                                                                                                     166 --- CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
           259
                                              445
                                                                                 239
                                                                                                                                                             224
                                                                                                                                                                                                                                     204 PheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAlaIleValGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                      164 AspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMetGlyGlnLeuAla 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                              144 ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGlySerGlySerIle 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 amino acid
||||||||::
|ThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu
                                            ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT
                                                                                 GluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIleLeuIleValIle
                                                                                                                      CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG
                                                                                                                                                           Gln-----GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                                                                                CAGAAAGTTCTGCCAGGAGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAG
                                                                                                                                                                                                                                                                        CTGACAGAAGACAGA-----GAACAAATCCGTCAAGGCCTAGAAGAACTC
                                                                                                                                                                                                                                                                                                             SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr
                                                                                                                                                                                                                                                                                                                                               AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.9e-09
166.00
46.15%
28.21%
8.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US/08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1155
66
42
96
30
                                                                                                                        444
                                                                                   258
                                                                                                                                                                                                387
                                                                                                                                                                                                                                       223
                                                                                                                                                                                                                                                                          327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   165
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                  Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-605-672-46
                                                                              US-08-605-672-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 46, Application US/08605672 Patent No. 5817515
                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION UNMBER: US 08/286,889
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION UNMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                            TELEX: 25-3856
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
COMPUTER: IBM PC com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Van der Vieren, Monica
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5817515el Human 2 Integrin Alph:
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/605,672
                                                                                                 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                     TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE:
                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Chicago
                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          598 CCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         351 GluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     316 LysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIleGlnGluLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         556 ---ACACAGCTGGCCCGGATT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'RY: United States 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGAT---TTCAATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----IlePheAlaIleGluGlyThrGluSerArgSerSerSerSerPheGlnHis 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Illinois
                                                                                                                                                             1155 amino acids
                                                                                                                                                                                                                                          312-474-0448
2.9e-09
166.00
                                                                                                                                                                                                                                                                                                       27866/32684
Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         --GCGGACAGTAAGGATCATGTGTTT 597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    315
```

```
RESULT 6
US-08-482-293A-46
                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             १
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-1_COPY_104_1207 (1-1104) x US-08-605-672-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                            Sequence 46, Application US/08482293A
Patent No. 5831029
GENERAL INFORMATION:
GAPPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5831029e1
NUMBER OF SEQUENCES: 103
COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                  ZIP: 60606-6402
                                            COUNTRY: United States
                                                             STATE: Illinois
                                                                              CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                109
                                                                                                                                                                                                                                                                                                                                                                               334
                                                                                                                                                                                                                                                                                                                                                                                                                658
                                                                                                                                                                                                                                                                                                                                                                                                                                                316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 279
                                                                                                                                                                                                                                                                                                                351
                                                                                                                                                                                                                                                                                                                GluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIleLeuIleValIle 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG. 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAG 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAlaIleValGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMetGlyGlnLeuAla 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGACAGAAGACAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr
                                                                                                                                                                                                                                                                                                                                               GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                LysvalGlyAsn---PhevalAlaLeuArgSerIleGlnArgGlnIleGlnGluLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysAla-----GlyIleIleArgTyrAlaIleGlyValGlyAspAlaPheArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                              TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT
Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46.15%
28.21%
8.29%
                                                                                                                                                                                                                                                                                                                                                                               IlePheAlaIleGluGlyThrGluSerArgSerSerSerSerPheGlnHis 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative: Mismatches: Indels:
                                                                                                                                                                  Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -GAACAAATCCGTCAAGGCCTAGAAGAACTC
                                                                                                                                                                  N
                                                                                                                                                                Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96
30
12
                                                                                                                Ŗ,
                                                                                                                                                                                                                                                                                                                                               759
                                                                                                                                                                  Alpha
                                                                                                                                                                    Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 223
                             á
                                                                    믕
                                                                                                 á
                                                                                                                                   밁
                                                                                                                                                           S
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-1_COPY_104_1207 (1-1104) x US-08-482-293A-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-482-293A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: 312-474-63:
TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 278
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 08/:
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph
REGISTRATION NUMBER: 38,655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/482,29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: 15
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 0
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                    164
                                                                                                                                                                                                                                                                                                                                                                                                                                   166
                                                                                                                                                                                                                                                                                                                                   184
                                                                    259
                                                                                                                                     239
                                                                                                                                                                    388 CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG
                                                                                                                                                                                                                                                                    204
                                                                                                                                                                                                                                                                                                    283
                                                                                                                                                                                                                                                                                                                                                                   223
     279
                                   499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 amino acid
                                                                                                                                                                                                                                                           PheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAlaIleValGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                AspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMetGlyGlnLeuAla 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGlySerGlySerIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG 165
                                                                                                                                                                                                                                   CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAAGGATTTGAAAGGGCCAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                               ---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
                                                                                                                                     GluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIleLeuIleValIle
                                                                                                                                                                                                                                                                                                    CTGACAGAAGACAGA-----
                                                                                                                                                                                                                                                                                                                                   SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr
                                  AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA 282
     LysAla-----GlyIleIleArgTyrAlaIleGlyValGlyAspAlaPheArgGlu
                                                                    ThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu
                                                                                                   ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.9e-09
166.00
46.15%
28.21%
8.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08/362,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08/173
                                                                                                                                                                                                    -GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      , 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Version
                                                                                                                                                                                                                                                                                                      -GAACAAATCCGTCAAGGCCTAGAAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1155
42
96
30
```

498 258 444 238 387 223

555

327

203

밁

Ś

밁 á ş 밁 á

밁

203

444 238 387 223 327 183

222 163

```
RESULT
 Query
                 Percent Similarity:
Best Local Similarity:
                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-943-363-46
                                                                                                                                   US-08-943-363-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 46, Applicat Patent No. 5837478 GENERAL INFORMATION:
                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el Human
NUMBER OF SEQUENCES: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 0 FILING DATE: 23-DEC-1993 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Gallatin, APPLICANT: Van der V
                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 21-DEC-1994 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 530 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                    TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
   Match:
                                                                            Мо
::
                                                                                                                                                                       TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                          NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                          LENGTH:
                                                                                                                                                                                                                                                                 TELEFAX: 312-474-0448
TELEX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          351 GluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6, Application US/08943363
5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIleGlnGluLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---ACACAGCTGGCCCGGATT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Illinois
                                                                                                                                                                                                            1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Marshall, O'Toole, Gerstein, Murray
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     United States
                                                                                                                                                     protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -IlePheAlaIleGluGlyThrGluSerArgSerSerSerSerPheGlnHis 350
2.9e-09
166.00
46.15%
28.21%
8.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        W. Michael
                                                                                                                                                                                                                                                                                                                          38,659
27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/08/943,363
                 Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -GCGGACAGTAAGGATCATGTGTTT
1155
66
42
96
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           β٦
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                              RESULT 8
US-09-193-043-46
                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-1_COPY_104_1207 (1-1104) x US-08-943-363-46
                 CURRENT FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-12-21
EARLIER FILING DATE: 1994-12-21
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                              Patent No. 62513
                                                                                                                                                                                                                                                                                                                                              Sequence 46,
                                                                                                                                                                                                                              APPLICANT: Gallatin, Michael W. APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: NO. 6251395el Human 2 FILE REFERENCE: 27866/35004
                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/193,043
CURRENT FILING DATE: 1998-11-16
   SOFTWARE: PatentIn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      556 ---ACACAGCTGGCCCGGATT-------GCGGACAGTAAGGATCATGTGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      164
                                                                                                                                                                                                                                                                                                                                                                                                                         351 GluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      388 CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           166 ---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             239 GluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIleLeuIleValIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIleGlnGluLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysAla-----GlyIleIleArgTyrAlaIleGlyValGlyAspAlaPheArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTGATGGAGAACTCCATGAAGATCTCTTTTTTCTATTCAGAG-----AGGGAGGCTAAT 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gin------GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAlaIleValGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGACAGAAGACAGA------GAACAAATCCGTCAAGGCCTAGAAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMetGlyGlnLeuAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA
                                                                                                                                                                                                                                                                                                                                              Application US/09193043
 Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IlePheAlaIleGluGlyThrGluSerArgSerSerSerSerPheGlnHis
                                                                                                                                                                                                                                                                                                                                                                                                                          364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (1-1155)
```

350

```
RESULT 9
US-09-688-307A-46
; Sequence 46, Application US/09688307A
; Patent No. 6432404
; GENERAL INFORMATION:
; APPLICANT: GALIARLIN, Michael W.
; APPLICANT: Van der Vieren, Monica
; TITLE OF INVENTION: No. 6432404el Human Be
; FILE REFERENCE: 27866/36646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores
Pred. No.:
                                                                                                                                                                밁
                                                                                                                                                                                            ક
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-1_COPY_104_1207 (1-1104) x US-09-193-043-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-193-043-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 46
LENGTH: 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 1155
TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  184
                                                                                                                                                                                                                                                                                                                                                                                          556
                                                                                                                                                                                                                                                                                                                                                                                                                                                        499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIleLeuileValIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                                           |||||||||:::
ThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAlaIleValGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGACAGAAGACAGA------GAACAAATCCGTCAAGGCCTAGAAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               {\tt AspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMetGlyGlnLeuAla}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG
                                                                                                                                                                                               GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                           CCCGTGAATGACGCCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCC
                                                                                                                                                                                                                                                                                                                                                         ProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGlnAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                       LysAla-----GlyIleIleArgTyrAlaIleGlyValGlyAspAlaPheArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA
                                                                                                                                                                                                                            -----IlePheAlaIleGluGlyThrGluSerArgSerSerSerSheGlnHis
                                                                                                                                                                                                                                                            TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2.9e-09
166.00
46.15%
28.21%
8.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                     Beta-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1155
42
96
30
                                                                                                                                                                                                                                                                                                                                                                                          597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 163
                                                                                                                                                                                                                                                                                                                             657
                                                                                                                                                                                                                                                                                                                                                           315
                                                                                                                                                                                                                                                                                                                                                                                                                          295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/688,30:
CURRENT FILING DATE: 2000-10-13
PRIOR APPLICATION NUMBER: 09/193,043
PRIOR FILING DATE: 1998-11-16
PRIOR APPLICATION NUMBER: 08/605,672
PRIOR APPLICATION NUMBER: 08/173,497
PRIOR PELING DATE: 1996-02-22
PRIOR PELICATION NUMBER: 08/173,497
PRIOR PILING DATE: 1993-12-23
PRIOR PILING DATE: 1993-12-23
PRIOR APPLICATION NUMBER: 08/286,889
PRIOR FILING DATE: 1994-08-05
PRIOR FILING DATE: 1994-08-05
PRIOR FILING DATE: 1994-12-21
PRIOR PILING DATE: 1994-12-21
PRIOR APPLICATION NUMBER: 08/943,363
PRIOR PILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
SOFTWARE: PATENTIN Ver. 2.0
                               밁
                                                                  S
                                                                                                     믕
                                                                                                                         δ
                                                                                                                                                                 밁
                                                                                                                                                                                            S
                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-1_COPY_104_1207 (1-1104) x US-09-688-307A-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-688-307A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 46
LENGTH: 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Mus
          658
                                                                                                                                                                                                                                                                                                                             388 CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG
                                                                                                                                                                                                                                                                                                                                                                                              328
                                                                                                                                                                                                                                                                                                                                                                                                                            204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       144 ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGlySerGlySerIle
                                      316
                                                                                                                                                                   279
                                      LysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIleGlnGluLys---
                                                                                                                      ---ACACAGCTGGCCCGGATT-------GCGGACAGTAAGGATCATGTGTTT
                                                                                                                                                                AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGAT----TTCAATGAG
                                                                                                                                                                                                                              ThraspGiyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGiuAlaGlu
                                                                                                                                                                                                                                                             ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT
                                                                                                                                                                                                                                                                                          CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                     CTGACAGAAGACAGA------GAACAAATCCGTCAAGGCCTAGAAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMetGlyGlnLeuAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG 165
        TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT
                                                                                                    ProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGlnAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                              Gln-----GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA
                                                                    CCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.9e-09
166.00
46.15%
28.21%
8.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ,307A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ::
                                                                                                                                                                                                                                                                                                                                                                                                                                                               327
                                                                                                                                                                                                                                    278
                                                                                                                                                                                                                                                                                                                                  444
             717
                                                                       657
                                                                                                                                       597
                                                                                                                                                                     295
                                                                                                                                                                                                     555
                                                                                                                                                                                                                                                                                                  258
                                                                                                                                                                                                                                                                                                                                                                238
                                                                                                                                                                                                                                                                                                                                                                                               387
                                                                                                                                                                                                                                                                                                                                                                                                                               223
```

717 333 657

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-1_COPY_104_1207 (1-1104) x US-09-350-259-46 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/350,259
CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/193,043
EARLIER APPLICATION NUMBER: 09/193,043
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                               밁
                                                                                                                     ş
                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-350-259-46
                                   δ
                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-350-259-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 46, App. Patent No. 66209:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Gallatin, Michael W. APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: NO. 6620915el Human 2 FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 1155
TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION:
                                                                                                                                                                                                             328
                                                                                                                                                                                                                                                                                               283
                                                                                                                                                                                                                                                                                                                                         184
                                                                                                                                                                                                                                                                                                                                                                                 223
                                                                                                                                                                                                                                                                                                                                                                                                                       164 AspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMetGlyGlnLeuAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                          166 ---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         351 GluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         334
259
                                       445
                                                                                 239
                                                                                                                                                                   224
                                                                                                                                                                                                                                                     204 PheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAlaIleValGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     109 CCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                             GluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIleLeuIleValIle
                                     ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT
                                                                                                                         CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG
                                                                                                                                                                   Gln-----GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                                                                                             CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAG
                                                                                                                                                                                                                                                                                               CTGACAGAAGACAGA------GAACAAATCCGTCAAGGCCTAGAAGAACTC
                                                                                                                                                                                                                                                                                                                                       SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr
                                                                                                                                                                                                                                                                                                                                                                               AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGlySerGlySerIle
ThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09350259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ----İlePheAlaIleGluGlyThrGluSerArgSerSerSerSerPheGlnHis 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.9e-09
166.00
46.15%
28.21%
8.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   759
                                                                                                                                                                                                                                                                                                                                                                                                                              183
  278
                                                                                    258
                                                                                                                           444
                                                                                                                                                                      238
                                                                                                                                                                                                             387
                                                                                                                                                                                                                                                       223
                                                                                                                                                                                                                                                                                               327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-485-618-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 11
  Pred. No.:
                                                                US-08-485-618-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 53, Application US/08485618 Patent No. 5728533
                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
Marshall, O'Toole, Gerstein, Murray & Borun
ADDRESSEE: Marshall, O'Toole, G300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5728533el Human
NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 21
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                     FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Chicago
STATE: Illinois
                                                                                                     TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                 TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             316 LysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIleGlnGluLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              556 ---ACACAGCTGGCCCGGATT--------GCGGACAGTAAGGATCATGTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       351 GluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGlnAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----IlePheAlaIleGluGlyThrGluSerArgSerSerSerSerPheGlnHis 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT
                                                                                                                                               1161 amino acids
                                                                                                                                                                                                                                    312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Floppy disk
  2.91e-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/485,618
                                                                                                                                                                                                                                                                                                                   38,659
                                                                                                                                                                                            53
                                                                                                                                                                                                                                                                                                    27866/32797
Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 Integrin Alpha Subunit
    1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    759
```

```
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                               RESULT 12
US-08-362-652-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-1_COPY_104_1207 (1-1104) x US-08-485-618-53 (1-1161)
                                                                                                                                                                                                                                          Sequence 53, Application US/08362652 Patent No. 5766850
                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5766850el
NUMBER OF SEQUENCES: 93
                                                                                                                              CORRESPONDENCE ADDRESS:
COMPUTER READABLE
                                                   STREET: 233 SO
CITY: Chicago
STATE: Illinoi
                   COUNTRY:
ZIP: 606
                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      223
                                                                                                                                                                                                                                                                                                                                          351
                 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIleLeuIleValIle
                                                                                                                                                                                                                                                                                                                                       GlumetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIleGlnGluLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGACAGAAGACAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMetGlyGlnLeuAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGlySerGlySerIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccagccrectaceec---egatteaacctetactrcattteeaacaaatcaeeaaetete
                                                                                                                                                                                                                                                                                                                                                                            GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysAla-----GlyIleileArgTyrAlaIleGlyValGlyAspAlaPheArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGTGAAAGAT---TTCAATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThraspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gln-----GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAAGGATTTGAAAGGGCCAGTGAG 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAlaIleValGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCC
                                                       Illinois
                                                                                      233 South Wacker Drive,
                                   United States
                                                                                                            Marshall, O'Toole,
                                                                                                                                                                                                                                                                                                                                                                                                                 ilePheAlaIleGluGlyThrGluSerArgSerSerSerSerPheGlnHis 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    166.00
46.15%
28.21%
8.29%
                                                                                        Gerstein, Murray &
re, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ----GAACAAATCCGTCAAGGCCTAGAAGAACTC 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels:
                                                                                                                                                                     Human
                                                                                                                                                                     N
                                                                                                                                                                   Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13066
                                                                                                                                                                       Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             238
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                      S
                                                                                                            밁
                                                                                                                                       ঠ
                                                                                                                                                                                     밁
                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-1_COPY_104_1207 (1-1104) x US-08-362-652-53 (1-1161)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-362-652-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/286,889
FILLNG DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/3239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Мо
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: ami
TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 0 FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                   445
                                                                                                                                                                                                                                                                                                     328
                                                                                                                                                                                                                                                                                                                                                                                                                     184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     144 ProGluCysProGlyGlnGluMetAspIleAlaPheLeuIleAspGlySerGlySerIle 163
 556
                                   279
                                                                                                                                                                                       239
                                                                                                                                                                                                                                                                                                                                                                                                                                                         223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amino acid
                                                                                                                                                                                     GluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIleLeulleValIle
                                                                                                                                                                                                                                                                                                     CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAG
                                                                                                                                                                                                                                                                                                                                         CTGACAGAAGACAGA-----GAACAAATCCGTCAAGGCCTAGAAGAACTC 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
---ACACAGCTGGCCCGGATT-----
                                     LysAla----
                                                                                                          ThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu 278
                                                                                                                                                 ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT
                                                                                                                                                                                                                          CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG 444
                                                                                                                                                                                                                                                                                                                                                                                                                 SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMetGlyGlnLeuAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG 165
                                                                      1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.91e-09
166.00
46.15%
28.21%
8.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08/362,652
                                   -GlyIleIleArgTyrAlaIleGlyValGlyAspAlaPheArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08/173,497
                                                                                                                                                                                                                                                                  -GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #1.25
 -- GCGGACAGTAAGGATCATGTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1161
66
42
96
30
   597
                                                                                                                                                                                         258
                                                                                                                                                                                                                                                                    238
                                                                                                                                                                                                                                                                                                       387
                                                                                                                                                                                                                                                                                                                                              223
```

밁 á 밁 Ş 밁 ş 밁 á 밁 5 밁 ঠ 밁 S 밁 á 밁 ş 용 δ 밁 ş 밁 र्

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-605-672-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                        Alignment Scores:
                                                                                                                                        US-08-605-672-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 53, Applicat Patent No. 5817515
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 08/286,889
PILING DATE: 5-AUG-1994
PRIOR APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
                                                                                                                                                          MOLECULE
                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                           No
::
                                                                                                                                                                                         TYPE: 6
                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                    TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ייה. 581751
אחר האארי
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                316 LysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIleGlnGluLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           351 GluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60606-6402
                                                                                                                                                                                    amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCC
                                                                                                                                                          TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT 717
                                                                                                                                                                                                                                                       25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/08605672
                                                                                                                                                                                                   1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   United States
                                                                                                                                                                                                                                                                    312-474-0448
                                                                                                                                                                        linear
                                                                                                                                                      protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IlePheAlaIleGluGlyThrGluSerArgSerSerSerSerPheGlnHis
                           2.91e-09
166.00
46.15%
28.21%
8.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US/08/605,672
                                                                                                                                                                                                                                     53
                                                                                                                                                                                                                                                                                                                  27866/32684
                                                           Length:
Matches:
Conservative:
                           Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 Integrin Alpha Subunit
              1161
66
42
96
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              315
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                    US-08-482-293A-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-1_COPY_104_1207 (1-1104) x US-08-605-672-53 (1-1161)
                                                                                                                                                                                                                                                                                                  Sequence 53, Application US/08482293A Patent No. 5831029
                                                                                                                                                                                                                             APPLICANT: Van der Vieren, Monica
APPLICANT: Van der Vieren, Monica
APPLICANT: No. 5831029e1
             ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPES Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPUTER:
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PSTENTIN Release #1.0, V.
CURRENT APPLICATION DATA:
                                                                                                                                                                                                      NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                           CITY:
STATE:
                                                                                                                         COUNTRY: United States
APPLICATION NUMBER:
                                                                                                                                                                       STREET:
                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    164 AspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMetGlyGlnLeuAla
                                                                                                                                                                                                                                                                                                                                                                                  351 GluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp
                                                                                                                                                                                                                                                                                                                                                                                                                718 GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      316 LysValGlyAsn---PheValAlaLeuArgSerlleGlnArgGlnlleGlnGluLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              239 GluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIleLeuIleValIle
                                                                                                                                        Chicago
: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAlaIleValGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGlnAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gln------GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGACAGAAGACAGA------GAACAAATCCGTCAAGGCCTAGAAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGAT---TTCAATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu
                                                                                                                                                                       233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                         Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                                                               IlePheAlaIleGluGlyThrGluSerArgSerSerSerSerPheGlnHis
                                                                                                                                                                                                                        103
US/08/482,293A
                                                                                                                                                                                       O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                       Human
                                Version
                                                                                                                                                                                                                                       2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                 759
                                                                                                                                                                                                                                        Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  163
```

315 597 295

FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:

27866/32684

PRIOR APPLICATION DATA: CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 23-DEC-1993

US 08/173,497

FILING DATE:

APPLICATION NUMBER:

US 08/286,889

```
용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity:
Query Match:
   밁
                                                        ঠ
                                                                                                                                   밁
                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-1_COPY_104_1207 (1-1104) x US-08-482-293A-53 (1-1161)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-482-293A-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEPHONE: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-0448
TELEPAX: 312-474-048
TELEPAX: 312-474-048
TELEPAX: 312-474-048
TELEPAX: 312-474-048
TELEPAX: 312-474-048
TELEPAX: 312-474-048
TELEPAX: 312-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   No.:
                                                                                                                                                                                                      499
                                                                                                                                                                                                                                                                          259
                                                                                                                                                                                                                                                                                                                                                                                                             239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     109 CCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG 165
   296
                                                                                                                                   279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             388 CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG 444
                                                                                                                                                                                                                                                                                                                                                                                                  ProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGlnAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAAGGCCCAGTGAG 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGACAGAAGACAGA------GAACAAATCCGTCAAGGCCTAGAAGAACTC 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AspGlnSerAspPheThrGlnMetLysAspPheValLysAlaLeuMetGlyGlnLeuAla 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATC 222
                                          ThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu 278
                                                                                                                                                                                                                                                                                                                                          ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAlaIleValGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr 203
                                                                                                                                                                                                      AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGAGTGAAAGAT---TTCAATGAG 555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.91e-09
166.00
46.15%
28.21%
8.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ----GlyLeuThrTyrThrAlaSerGlyIleGlnLysValValLys
                                                                                                                                   -GlyIleIleArgTyrAlaIleGlyValGlyAspAlaPheArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10046
000
000
000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    238
                                                                                                                                                                                                                                                                                                                                                                                                                 258
   315
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-943-363-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
Ś
                              US-09-970-076-1_COPY_104_1207 (1-1104) x US-08-943-363-53 (1-1161)
                                                                                                                                                                                                      Alignment Scores:
                                                                                                   Query Match:
                                                                                                                                                                 Score:
                                                                                                                                                                                                                                                   US-08-943-363-53
                                                                                                                      Best Local Similarity:
                                                                                                                                         Percent Similarity:
                                                                                                                                                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 53, Application US/08943363 Patent No. 5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
APPLICATION NUMBER: US 08/362,652
APPLICATION NUMBER: US 08/362,652
APPLICATION NUMBER: JOSEPH A.
ATTORNEY/ACENT INFORMATION:
NAME: Williams Jr., JOSEPH A.
REGISTRATION NUMBER: 38,659
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5837478el
NUMBER OF SEQUENCES: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IHM PC compatible
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/943,36
                                                                                                                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                        TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                 LENGTH: 1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 351 GluMetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          718 GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 316 LysValGlyAsn---PheValAlaLeuArgSerIleGlnArgGlnIleGlnGluLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          598 CCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCC
  109 CCAGCCTGCTACGGC---GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Illinois
: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Marshall, O'Toole, Gerstein, Murray & Borun
233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                  protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -IlePheAlaIleGluGlyThrGluSerArgSerSerSerSerPheGlnHis 350
                                                                                                2.91e-09
166.00
46.15%
28.21%
8.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       38,659
188 - 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27866/32684
                                                                                                   Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                       Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 Integrin Alpha Subunit
                                                                                    96
96
120
120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     333
```

음 중 음

5 밁

```
Search completed: December 14, 2005, Job time: 51.8908 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    204 PheThrGluPheLysSerSerLeuSerProGlnSerLeuValAspAlaIleValGlnLeu 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               283 CTGACAGAAGACAGA------GAACAAATCCGTCAAGGCCTAGAAGAACTC 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  351
                                                                                                                      718 GTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGAC 759
                                                                                                                                                          334 -----IlePheAlaIleGluGlyThrGluSerArgSerSerSerPheGlnHis 350
                                                                                                                                                                                                     658 TGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTT 717
                                                                                                                                                                                                                                                                                                                              296 ProThrAlaLeuGlnGluLeuAsnThrIleGlySerAlaProSerGlnAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                    556
                                                                                                                                                                                                                                                                                                                                                                                                        259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             445 ACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAAT 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     239 GluLeuPheHisSerLysAsnGlyAlaArgLysSerAlaLysLysIleLeuIleValIle 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  388 CAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTG 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              328 CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAG 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlumetSerGlnGluGlyPheSerSerAlaLeuSerMetAsp 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ||||||||:::
||ThrAspGlyGlnLysPheArgAspProLeuGluTyrArgHisValIleProGluAlaGlu 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerThrSerThrSerPheSerLeuMetGlnTyrSerAsnIleLeuLysThrHisPheThr 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAA 282
                                                                                                                                                                                                                                                                                                                                                                  12:02:48
                                                                                                                                                                                                                                                                                                                                                                      597
```

유

Ś 몽

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                   Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Command line parameters:

-MODEL-frame+ nip.model -DEV=xlp
-Q-[cgn2 ]/USPTO_GPOOl p/US09970076/runat 14122005 110511 26579/app_query.fasta_1.2894
-DB=PublIshed_Applications_AA_Main -QFMT=fastan -SUFFIX=rapbm -MINWATCH=0.1
-LOOPEXT=0 -UNITS_blits -START=1 =END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MX=100
-THR_MIN=0 -ALIGN=15 -MODEL-LOCAL -OUTFMT=pcto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=200000000 -USER=US09970076 @CGN 1 1 604 @runat 14122005 110511 26579
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUUERY -NUSTES=50 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9::
                                                                                                                                                                                                                                                                                                                                                 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                     Score
 protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             December 14, 2005, 11:59:14 ; Search time 165:732 Seconds (without alignments) 5566.636 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                     Published Applications AA_Main:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US11B_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-1_COPY_104_1207
2003
                                                                                                                                                                                                                                                   Match
                                                                                                                                                                                                                                                                     Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1867569 seqs, 417829326 residues
   atggccacggcggagcggag......
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Copyright
                                                                                                                                                                                                                                                     Length
     GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                       B
                 US-11-047-278-2

US-09-918-715-23

US-09-918-715-232

US-10-301-822-199

US-10-408-765A-1823

US-10-474-794-187

US-10-474-794-232

US-10-474-794-232

US-10-979-159-187

US-10-979-159-232

US-11-047-278-6

US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    frame_plus_n2p model
                                                                                                                                                                                                                                                                                                               SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .gtgaggaaaataaaataaaa 1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3735138
Sequence 2, Appli
Sequence 187, App
Sequence 132, App
Sequence 199, App
Sequence 1823, App
Sequence 187, App
Sequence 232, App
Sequence 232, App
Sequence 232, App
Sequence 621, Appli
Sequence 621, Appli
Sequence 621, Appli
Sequence 621, Appli
Sequence 621, Appli
                                                                                                                                                                                                                                                       Description
     S
```

ALIGNMENTS

```
13 1793 89.5 562 3 US-09-918-715-194 Sequence 194, App 115 1793 89.5 562 4 US-10-474-794-194 Sequence 301, App 116 1793 89.5 562 5 US-10-474-794-194 Sequence 301, App 117 1793 89.5 562 5 US-10-979-159-301 Sequence 301, App 118 1793 89.5 562 5 US-10-979-159-301 Sequence 301, App 118 1793 89.5 562 5 US-10-979-159-301 Sequence 18, Appl 119 1670 83.4 551 4 US-10-038-307-18 Sequence 18, Appl 119 1654.5 82.6 564 4 US-10-038-307-20 Sequence 20, Appl 119 1654.5 82.6 564 4 US-10-038-307-20 Sequence 20, Appl 119 1654.5 82.6 564 4 US-10-038-307-20 Sequence 20, Appl 119 1636 81.7 33.3 4 US-10-038-307-20 Sequence 20, Appl 119 1636 81.7 543 4 US-10-038-307-20 Sequence 21, Appl 119 1636 81.7 543 4 US-10-038-307-24 Sequence 22, Appl 119 1636 81.7 543 4 US-10-038-307-24 Sequence 24, Appl 119 1636 81.7 543 4 US-10-038-307-26 Sequence 24, Appl 119 1636 81.7 543 4 US-10-038-307-27 Sequence 24, Appl 119 1636 81.7 543 4 US-10-038-307-27 Sequence 24, Appl 119 1636 81.7 543 4 US-10-038-307-27 Sequence 24, Appl 119 1636 81.7 543 4 US-10-038-307-27 Sequence 27, Appl 119 1636 81.7 543 4 US-10-038-307-14 Sequence 27, Appl 119 1636 81.7 543 4 US-10-038-307-16 Sequence 27, Appl 119 1636 81.7 543 4 US-10-038-307-16 Sequence 27, Appl 119 1636 81.7 543 4 US-10-038-307-16 Sequence 27, Appl 119 1636 81.7 543 4 US-10-038-307-16 Sequence 27, Appl 119 1636 81.7 543 4 US-10-038-307-16 Sequence 110, Appl 119 1636 81.7 543 4 US-10-038-307-16 Sequence 110, Appl 119 1636 81.7 543 4 US-10-038-307-16 Sequence 110, Appl 119 1636 81.7 543 4 US-10-038-307-16 Sequence 110, Appl 119 1636 81.7 543 4 US-10-038-307-16 Sequence 110, Appl 119 1636 81.7 543 4 US-10-038-307-16 Sequence 110, Appl 119 1636 81.7 543 4 US-10-038-307-16 Sequence 110, Appl 119 1636 81.7 543 4 US-10-038-307-12 Sequence 110, Appl 119 1636 81.7 543 4 US-10-038-307-12 Sequence 110, Appl 119 1636 81.7 543 4 US-10-038-307-12 Sequence 110, Appl 119 1636 81.7 543 4 US-10-201-292-30 Sequence 120, Appl 119 1636 81.7 543 4 US-10-201-292-30 Sequence 120, Appl 119 1636 81.7 543 4 US-10-201-292-30 Seque
```

1 ATGGCCACGGCGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT 60

```
1021
                                                                              321
                                                                                                     961
                                                                                                                           301
                                                                                                                                                 901
                                                                                                                                                                        281
                                                                                                                                                                                              841
                                                                                                                                                                                                                     261
                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                          201
                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGTGCTCATCTGCGCCGGGCAAGGGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC
                                 ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                    GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCCAGCGTCATCATTGCTTTGACTGAGAGGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAGTGAGGAAAATAAAATAAAA 1104
                                                                                          TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCCTCTGG
                                                                                                                                                                                                                                                                 ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                               GTGAGAGAGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                             | IeGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                            ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                         TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                               SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                         1080
                                                                                                      1020
                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100
                                                                                                                           320
                                                                                                                                                                         300
                                                                                                                                                                                                                     280
                                                                                                                                                                                                                                          840
                                                                                                                                                                                                                                                                  260
                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                           220
                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 187. Application US/09918715

Sequence 187. Application VS/09918715

Publication No. US20030017157A1

GENERAL INFORMATION:

APPLICANT: Berd St. Croix

APPLICANT: Bert Vogelstein

APPLICANT: Kenneth Kinzler

TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS

FILE REFERENCE: 1107.00134

CURRENT APPLICATION NUMBER: US/09/918,715

CURRENT FILING DATE: 2001-08-01

PRIOR APPLICATION NUMBER: 60/222,599

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR FILING DATE: 2000-08-11

NUMBER OF SEQ ID NOS: 358

SOPTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 187

LENGTH: 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; LENGTH: 564
; TYPE: PRT
; ORGANISM: Homo :
US-09-918-715-187
                                                                                                                                                          Ş
                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-1_COPY_104_1207 (1-1104)
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 2
US-09-918-715-187
                 δ
                                                                5
                                                                                          밁
                                                                                                              á
                                                                                                                                      문
                                                                                                                                                                                   문
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                 121
  161
                      481
                                               141
                                                                     421
                                                                                           121
                                                                                                                 361
                                                                                                                                         101
                                                                                                                                                             301
                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                   81
                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                            GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                            ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                               TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                    CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                  ATGGCCACGGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluSerGluGluAsnLysIleLys
                                                                                           HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                       CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                  SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                        MetAlaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                         3.24e-180
1894.00
100.00%
100.00%
100.00%
94.56%
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                   x US-09-918-715-187
                                                                                                                                                                                                                                                                                                                                                                                                                                         0 0 0 0 4
                                                                                                                                                                                                                                                                                                                                                                                                                     (1-564)
```

음 성 음 성 음

8 8 8 8 8

100

300 300

540

360 120 420 140 480

160

180

120

20

40

8 8 8 8

망

**& B S** 

밁

5 8 5 8 5

밁

```
APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/28
                                                                                                                                                                                                                                                                                                                                                                        RESULT 3
US-09-918-715-232
Percent Similarity:
Best Local Similarity:
Query Match:
                                               Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                    Sequence 232, Application US/09918715 Publication No. US20030017157A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                    1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                             341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                              GluSerGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAGTGAGGAA
3.24e-180
1894.00
100.00%
100.00%
94.56%
                                                                                                                                                                                                                                                                                                                                                                                                                                     1092
  Length:
Matches:
Conservative:
Mismatches:
Indels:
 364
0 0 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-1_COPY_104_1207 (1-1104) x US-09-918-715-232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멂
                                           5
                                                                                          5
                                                                                                                  문
                                                                                                                                            δ
                                                                                                                                                                  문
                                                                                                                                                                                          Ş
                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                            문
                           321
                                                   961
                                                                           301
                                                                                                                                                   841
                                                                                                                                                                            261
                                                                                                                                                                                                  781
                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                           221
                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                            281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                           TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                          TGTCCAGCGCCTATCTTAAAAGAAGTIGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                         ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                          AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
   TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (1-564)
       1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                               200
                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               40
                                                                                                                              300
                                                                                                                                                      900
                                                                                                                                                                              280
                                                                                                                                                                                                    840
                                                                                                                                                                                                                             260
                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                             220
```

밁 ð 밁 S 문 Ş 밁 á 밁 Ś 밁 S 밁 δ 밁 δ 밁 á 밁

Ś

뭐

```
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Schlegel, Robert
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Morahan, John E.
APPLICANT: Morahan, John E.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: THERAPY OF COLON CANCER
TITLE OF INVENTION: MOVEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPMO1-029P2RNM
COURENT APPLICATION NUMBER: US 50/301,822
CURRENT APPLICATION NUMBER: US 50/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 199
LENGTH: 564
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 4
US-10-301-822-199
                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-301-822-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: PRT
; ORGANISM: Homo
US-10-301-822-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 199, Applic Publication No. US20 GENERAL INFORMATION:
                                  301
                                                                                               241
      101
                                                                                                                                                              181
                                                                                                                                                                                                                           121
                                                                  81
                                                                                                                               61
                                                                                                                                                                                              41
                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                          61
   CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                             GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAGTGAGGAA 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                               TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAA
                                                                                                                                                                                              GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                              GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCGGAAT
                                                                                                                                                                                                                                                         LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                          CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                        MetAlaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluserGluGlu 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/10301822
o. US20030148410A1
                                                                                                                                                                                                                                                                                                                                                                                                                                  3.24e-180
1894.00
100.00%
100.00%
94.56%
                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PREVENTION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                   100
                                                                                                 300
                                                                                                                                80
                                                                                                                                                                                              60
                                                                                                                                                                                                                             180
APPLICANT: Ghosh, Soumitra S.
APPLICANT: Fahy, Eoin D.
APPLICANT: Taylor, Bring
APPLICANT: Glbson, Bradford W.
APPLICANT: Glbson, Bradford W.
APPLICANT: Taylor, Steven W.
APPLICANT: Marnock, Dale E.
TITLE OF INVENTION: TARGETS FOR THERAPEUTIC INTERVENTION
TITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME
FILE REFERENCE: 660088.465
CURRENT APPLICATION NUMBER: US/10/408,765A
CURRENT FILING DATE: 2003-04-04
NUMBER OF SEQ ID NOS: 3077
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                          RESULT 5
US-10-408-765A-1823
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                            Sequence 1823, Application US/10408765A Publication No. US20040101874A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                       1021
                                                                                                                                                                                                                                                                                                                                                                                                         341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAGTGAGGAA 1092
                                                                                                                                                                                                                                                                                                                                                                                                    ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                          GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
```

맑 á 밁 δ 밁 5 밁 á 유 Ś 밁 ঠ

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                ; LENGTH: 564
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-765A-1823
                                                                                                                                       S
                                                                                                                                                  음 성
                                                                                                                                                                          밁
                                                                                                                                                                                    ঠ
                                                                                                                                                                                                  밁
                                                                                                                                                                                                          5
                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                  용
                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                       US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-408-765A-1823
                                                                                           ક
                                                                                                         밁
                                                                                                                 Ş
                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
     δ
                밁
                        & 유
                                             ঠ
                                                           음 중
                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                Х
О
:
                                                                                                                                161
                                                                                                                                                       141
                                                                                                                                                                421
                                                                                                                                                                             121
                                                                                                                                                                                        361
                                                                                                                                                                                                   101
                                                                                                                                                                                                              301
                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                           181
                                                                                                         181
                                                                                                                    541
                                                                                                                                           481
                                                                                                                                                                                                                                                                                 121
      841
                                      241
                                                 721
                                                            221
                                                                        661
                                                                                   201
                                                                                              601
                                                                                                                                                                                                                          18
                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                  ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                                                                                                                                                                                               GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                            GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                            ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                 ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACACTTATTTACTG
                                      GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                            3.24e-180
1894.00
100.00%
100.00%
94.56%
                                                                                                                                                                                                                                                                                                                                                    Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
                                                                                                                                                                                                                                                                                                                                          (1-564)
                                                                                                                                                        . 160
                                                                                                                                                                                         420
                                                                                                                                                                                                               360
                            840
                                                                                               660
                                                                                                                                180
                                                                                                                                            540
                                                                                                                                                                   480
                                                                                                                                                                             140
                                                                                                                                                                                                    120
                                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                 80
                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                             40
                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                    20
                                                  780
                                                              240
                                                                                    220
                                                                                                          200
                                                                                                                      600
```

```
GENERAL INFORMATION:
APPLICANT: Carson-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: St. Croix, Bert
APPLICANT: Vogelstein, Bert
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
FILE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 187
LENGTH: 564
TYPE: PAT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
US-10-474-794-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
음 중
                                     밁
                                                 5
                                                                     B
                                                                                           ঠ
                                                                                                                   밁
                                                                                                                                δ
                                                                                                                                                        밁
                                                                                                                                                                         δ
                                                                                                                                                                                              US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-474-794-187
                                                                                                                                                                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 187, Application US/10474794 Publication No. US20040213793A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   281
                                                                                               121
                  241
                                                         181
 81
                                      61
                                                                            41
                                                                                                                   21
                                                                                                                                       61
                                                                                                                                                          \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                           ATGGCCACGGCGGAGGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GluSerGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGAGTGAGGAA 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                                                                                                    3.24e-180
1894.00
100.00%
100.00%
100.00%
94.56%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       364
                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                      364
0
0
0
                                                                                                                                                                                                   (1-564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              320
                                                                                                 180
                                                                                                                                                                                60
                                        80
                                                            240
                                                                                60
                                                                                                                     40
                                                                                                                                                             20
```

```
RESULT 7

US-10-474-794-232

Sequence 232, Application US/10474794

Publication No. US20040213793A1

GENERAL INFORMATION:

APPLICANT: St. Croix, Brad

APPLICANT: Vogelstein, Bert

APPLICANT: Vigelstein, Bert

APPLICANT: Vigelstein, Bert

APPLICANT: NICENTION: ENDOTHELIAL CELL EXPRESSION PAI

FILE REFERENCE: 1107, 00179

CURRENT FILING DATE: 2003-10-14

PRIOR APPLICATION NUMBER: US/10/474,794

CURRENT FILING DATE: 2003-10-14

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR FILING DATE: 2001-04-01

PRIOR APPLICATION NUMBER: 60/308,829

PRIOR FILING DATE: 2001-08-01
                                                                                                                                                                   밁
                                                                                                                                                                                                                          밁
                                                                                                                                             멍
                                                                                                                                                       ঠ
                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                             밁
                                                                                                                                 1081
                                                                                                                                                          1021
                                                                                                                                                                       321
                                                                                                                                                                                    961
                                                                                                                                                                                                 301
                                                                                                                                                                                                            901
                                                                                                                                                                                                                           281
                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                     261
                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                       221
                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                     361
                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                      GAGAGTGAGGAA 1092
                                                                                                                                            ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                            GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                               AspGlyLeuSerPheIleSerSerSerValIleIleThrThrHisCysSerAspGly
                                                                                                                                                                                                              ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                    1020
                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                       340
                                                                                                                                                                                                              960
                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                              260
                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                 220
                                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                       140
                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                     280
                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No.:
Score:
                                                                                                                                                                    δ
                                                                                                                                                                                              8
                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                    뮍
                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                       ; NUMBER OF SEQ ID NOS: 359

SOFTWARE: FASTSSQ for Windows Version

SEQ ID NO 232

; LENGTH: 564

TYPE: PRT

; ORGANISM: Homo sapiens

US-10-474-794-232
                                                    밁
                                                            δ
                                                                           밁
                                                                                        δ
                                                                                                        밁
                                                                                                                Ş
                                                                                                                                밁
                                                                                                                                           δ
                                                                                                                                                          밁
                                                                                                                                                                                    문
                                                                                                                                                                                                              문
                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-1_COPY_104_1207
          5
                      밁
                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                            Scores:
                                                                                           601
                                                                                                                     541
                                                                                                                                  161
                                                                                                                                              481
                                                                                                                                                            141
                                                                                                                                                                       421
                                                                                                                                                                                     121
                                                                                                                                                                                                 361
                                                                                                                                                                                                              101
                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                       121
  261
             781
                                       721
                                                                 661
                                                                              201
                                                                                                        181
                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                    21
                                                                                                                                                                                                                                                                                                                                 61
                                                                                                       ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                    GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                         GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                             CTGGTGCTCATCTGCGCCCGGGCAAGGGACGCAGGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                    3.24e-180
1894.00
100.00%
100.00%
100.00%
94.56%
                                                                                                                                                                                                                                                                                                                                                                        (1-1104)
                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                        x US-10-474-794-232
                                                                                                                                                                                                                                                                                                                                                                                     (1-564)
```

Ş

Ş 片 δ 밁 ঠ

S

밁 S

180

540 160

840 260 240

720

780

220 660 200 600 480 140 420 120 360 100 300 80 240 60 180

40 120 20 60

5

S

밁

δ 밁 δ 밁 á δ 밁 S

밁

र् 밁

밁 Ş 밁 ð 밁 5 밁

100

300 80

```
APPLICANT: Brad St. Croix
APPLICANT: Beart Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/10/979,159
CURRENT FILING DATE: 2004-411-03
PRIOR APPLICATION NUMBER: US/09/918,715
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR FILING DATE: 2000-08-11
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 187
LENGTH: 564
TYPE: PAT
ORGANISM: Homo sapiens
US-10-979-159-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 8
US-10-979-159-187
; Sequence 187, Application US/10979159
; Publication No. US20050142138A1
                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                               US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-979-159-187 (1-564)
                                                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                281
            181
                                                      121
                                                                                                  61
                                 4
                                                                            21
                                                                                                                                             -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATGGCCTCTTTTTATCTCCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGAGTGAGGAA 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                      ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspGlyLeuSerPheIleSerSerValIleIleThrThrThrHisCysSerAspGly
                                GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACCACTGGAAT 180
                                                                                                    CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC 120
                                                                            3.24e-180
1894.00
100.00%
100.00%
94.56%
                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                        00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           960
                                                                               40
                                                                                                                          20
 Sequence 232, Application US/10979159
publication No. US20050142138A1
pelicati NFORMATION:
APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESS;
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/10/979,159
                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                    RESULT 9
US-10-979-159-232
                                                                                                                                                       S
                                                                                                                                                                          日
                                                                                                                                                                                                 S
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              341
                                                                                                                                                                                                                             321
                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                    281
                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                               261
                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                      221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                            ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAGTGAGGAA 1092
                                                                                                                                                                              TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1080
                                                                                                                                                                                                                                       TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCCTCTGG 1020
                                                                                                                                                                                                                                                                      TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysaspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                             SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                         CELL EXPRESSION
                          PATTERNS
```

660

200 600 180

240 720 220

780

540 160 480 140 420 120 360

340

300 900 280 840 260

S

용

В र्

S

δ В

```
CURRENT FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: US/09/918,715
PRIOR FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR FILING DATE: 2000-04-11
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 232
LENGTH: 564
TYPE: PAT
ORGANISM: Homo Sapiens
US-10-979-159-232
                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                           밁
         S
                          밁
                                        ş
                                                           밁
                                                                         S
                                                                                             밁
                                                                                                           Ś
                                                                                                                               밁
                                                                                                                                           5
                                                                                                                                                                밁
                                                                                                                                                                              ર્
                                                                                                                                                                                                  밁
                                                                                                                                                                                                               S
                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                   ઇ
                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                          뭐
                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-979-159-232
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores: Pred. No.:
                                                           181
                                                                            541
                                                                                             161
                                                                                                              481
                                                                                                                                141
                                                                                                                                                421
                                                                                                                                                                 121
                                                                                                                                                                                  361
                                                                                                                                                                                                   101
                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                       41
                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                           \vdash
                                                                                                                                                                                                                                                                                                                                                                         CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                     GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                        ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                         ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                    TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                     3.24e-180
1894.00
100.00%
100.00%
94.56%
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                             564
0 0 0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                            (1-564)
                                                                                             180
                                           660
                                                            200
                                                                            600
                                                                                                                                160
                                                                                                                                                                 140
                                                                                                                                                                                  420
                                                                                                                                                                                                   120
                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                     100
                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                       90
                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                          40
                                                                                                                                                                                                                                                                                                                                                                            20
                          220
                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                        60
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                              APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR FILING DATE: 2001-10-03
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 6
TENGTH: 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
               Ş
                                           밁
                                                                                                                                                               Alignment Scores: Pred. No.: Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
US-11-047-278-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
맒
                                                                S
                                                                                       US-09-970-076-1_COPY_104_1207 (1-1104) x US-11-047-278-6 (1-564)
                                                                                                                                                                                                               US-11-047-278-6
                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 6, Application US/11047278
Publication No. US20050196407A1
GENERAL INFORMATION:
                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         221
21
                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAGTGAGGAA 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGAGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCCTCCACCCCCTGCCGAG 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
ATGGCCACGGCGGAGGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspGlyLeuSerPheIleSerSerSerValIleIleThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                         sapiens
                                                                                                                 3.24e-180
1894.00
100.00%
100.00%
94.56%
                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                               20
                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
  40
```

```
RESULT 11
US-09-833-245-621
y Sequence 621, Application US/09833245
y Publication No. US20040010134A1
y GENERAL INFORMATION:
                                                                   음 성 음
                                                                                                             ঠ
                                                                                                                              음 성 음
                                                                                                                                                                       중 유
                                                                                                                                                                                                   र्
                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                  음 성
                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                        음 성
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                    ર્
                                                          1081
                                                                                      1021
                                                                                                                                                                                                                                                                                                                                        161
                                                                                                                                                                                                                                                                                                                                                      481
                                                                        341
                                                                                                    321
                                                                                                                                                                           841
                                                                                                                                                                                                                                                  221
                                                                                                                                                                                                                                                                  199
                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                  961
                                                                                                                                               901
                                                                                                                                                                                         261
                                                                                                                                                                                                        781
                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                 301
                                                                                                                                                            281
                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                    ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                             CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyGlyPheAspI
                                                                                                                                                                                                                                                                               GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                  ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                TCAGAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                           GluSerGluGlu
                                                          GAGAGTGAGGAA
                                                                       TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1080
                                                                                                           TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                        ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                         SerGluArgGl
                                                                                                     Seril
                                                                                                     .eLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                                                                                                                                                                                                                                                                                                                                         1092
                                                                                                                    1020
                                                                                                                                  320
                                                                                                                                                960
                                                                                                                                                                            900
                                                                                                                                                                                           280
                                                                                                                                                                                                         840
                                                                                                                                                                                                                        260
                                                                                                                                                                                                                                      780
                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                 220
                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                             200
                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                   140
                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Prote:
FILE REFERENCE: PF546FCT
CURRENT APPLICATION NUMBER: US/09/833,241
CURRENT FILING DATE: 2001-04-12
PRIOR APPLICATION NUMBER: 60/229, 358
PRIOR FILING DATE: 2000-04-12
PRIOR APPLICATION NUMBER: 60/256, 931
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR FILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR FILING DATE: 2000-04-25
NUMBER OF SEQ ID NOS: 2267
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 621
LENGTH: 403
TYPES: PRT
ORGANISM: Homo sapiens
US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                              Score:
         음 성
                               유 성
                                                             밁
                                                                           ঠ
                                                                                             밁
                                                                                                        S
                                                                                                                       B
                                                                                                                                     S
                                                                                                                                                  밁
                                                                                                                                                                ঠ
                                                                                                                                                                                   밁
                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                 US-09-970-076-1_COPY_104_1207 (1-1104)
                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                      No.:
                       601
                                      181
                                                   541
                                                                   161
                                                                                481
                                                                                              141
                                                                                                             421
                                                                                                                                         361
                                                                                                                                                       101
                                                                                                                                                                    301
                                                                                                                                                                                                  241
                                                                                                                                                                                                                               181
                                                                                                                          121
                                                                                                                                                                                                                                                            121
         201
                                                                                                                                                                                    81
                                                                                                                                                                                                                61
                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                      ۲
        ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCCTTTTTCTAT
                                                                                                                          CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                       GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                             CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                      9.11e-180
1889.00
100.00%
100.00%
94.31%
                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Proteins
                                                                                                                                                                                                                                                                                                                                   x US-09-833-245-621
```

(1-403)

100 300 80

660

600 180 540 160 480 140 420 120

200

60 180

240

120 20

```
CURRENT APPLICATION NUMBER: US/09/833,245
; CURRENT APPLICATION NUMBER: 60/229, 358
; PRIOR APPLICATION NUMBER: 60/229, 358
; PRIOR PILING DATE: 2000-04-12
; PRIOR APPLICATION NUMBER: 60/256, 931
; PRIOR FILING DATE: 2000-12-21
; PRIOR APPLICATION NUMBER: 60/199, 384
; PRIOR FILING DATE: 2000-04-25
; NUMBER OF SEQ ID NOS: 2267
; SOFTWARR: PATENTIN Ver. 2.1
; SEQ ID NO 620
; LENGTH: 403
; TYPE: PRT
   ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: SITE
   LOCATION: (175)
   OTHER INFORMATION: Xaa equals any of the na
                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
               Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                         RESULT 12
US-09-833-245-620
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
 Percent Similarity:
                                     NAME/KEY: SITE
LOCATION: (320)
OTHER INFORMATION: Xaa e
NAME/KEY: SITE
LOCATION: (331)
OTHER INFORMATION: Xaa e
NAME/KEY: SITE
LOCATION: (368)
OTHER INFORMATION: Xaa e
US-09-833-245-620
                                                                                                                                                                                                                                                                                 Sequence 620, Application US/09833245 Publication No. US20040010134A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                           APPLICANT: Human Genome Sciences, Inc. TITLE OF INVENTION: Albumin Fusion Proteins FILE REFERENCE: PF546PCT
                                                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                                                                        1081 GAGAGTGAG
                                                                                                                                                                                                                                                                                                                                                                341
                                                                                                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                          281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      221
                                                                                                                                                                                                                                                                                                                                                              SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                                                                                                                                                                                                                                                                                                                                                                                                     TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ValargGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluserGlu
7.29e-178
1870.00
99.17%
                                                                                                                                                                                                                                                                                                                                                1089
                                              equals
                                                                                            equals
                                                                      equals
                                               any
                                                                     any
                                                                                            any
                                                                                            of.
                                               of.
                                                                                                                  of the naturally occurring
Length:
Matches:
Conservative:
                                                                     얁
                                                                                             the
                                               the
                                                                      the
                                                                     naturally
                                                                                            naturally
                                               naturally
403
360
                                               occurring
                                                                                            occurring
                                                                     occurring
                                               L-amino
                                                                      L-amino
                                                                                            L-amino
                                                                                                                    L-amino
                                                                      acids
                                               acids
                                                                                                                    acids
                                                                                                                                                                                                                                                                                                                                                                              1080
                                                                                                                                                                                                                                                                                                                                                                                                             1020
                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                              340
                                                                                                                                                                                                                                                                                                                                                                                                                            320
                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                      Ś
                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                 뮹
                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                             뮹
                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
            Ş
                               밁
                                            Ş
                                                             밁
                                                                         Ş
                                                                                            밁
                                                                                                          δ
                                                                                                                           밁
                                                                                                                                     Ş
                                                                                                                                                         밁
                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-1_COPY_104_1207 (1-1104) x US-09-833-245-620
                961
                                                                                                                                                                                                      601
                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                301
 321
                                301
                                                                                             261
                                                                                                                           241
                                                                                                                                          721
                                                                                                                                                                                         201
                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                               GTGAGAGGAAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                        TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCTGG
                                                                                                                         ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99.17%
93.36%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (1-403)
                                                                                                            840
                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                               100
                                                                                             280
                                                                                                                            260
                                                                                                                                                          240
                                                                                                                                                                                                        660
                                                                                                                                                                                                                       200
                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                    160
                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                  140
                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                               300
                                                                                                                                          780
                                                                                                                                                                         720
                                                                                                                                                                                                                                                      180
```

ঠ

용 5

밁

```
Sequence 194, Application US/09918715
| Sequence 194, Application US/09918715
| Publication No. US20030017157A1
| GENERAL INFORMATION:
| APPLICANT: Berd St. Croix
| APPLICANT: Berd St. Croix
| APPLICANT: Bert Vogelstein
| APPLICANT: Kenneth Kinzler
| TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
| FILE REFERENCE: 1107.00134
| CURRENT APPLICATION NUMBER: US/09/918,715
| CURRENT FILING DATE: 2001-08-01
| PRIOR APPLICATION NUMBER: 60/222,599
| PRIOR APPLICATION NUMBER: 60/224,360
| PRIOR APPLICATION NUMBER: 60/284,360
| PRIOR APPLICATION NUMBER: 60/284,360
| PRIOR APPLICATION NUMBER: 60/284,360
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
US-09-918-715-194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-1_COPY_104_1207 (1-1104) x US-09-918-715-194 (1-562)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: PRT ; ORGANISM: Mus musculus US-09-918-715-194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
0
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              341
                                                      385
                                                                                             107
                                                                                                                                                                                                                                                                                                                                                                             145
                  127
                                                                                                                                 325
                                                                                                                                                                                                                                                                                              205
                                                                                                                                                                                                                265
                                                                                                                                                                                                                                                        67
                                                                                                                                                                                                                                                                                                                                   47
                                                                                                                                                                         87
                                                                                                                                                                                                                                                                                                                                                                                                                     27
                                                                                                                                                                                                                                                                                                                                                                                                                                                        85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |||||||||
|GluSerGlu 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |||||| ||| ::: ||| :::||| ||||||||||| 26 |
LeuGlyAlaGlyLeuArgGlyLeuCysValAlaAlaLeuValLeuValCysAlaGlyHis 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCCGGGCAA
            TTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGA 264
                                                                                                                                                                                                                                                                                                                                   GGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACCGCGGATTTGACCTGTACTTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                     GlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPheIle
                                                                                                                  GlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGlu
                                                                                                                                                                                                                GGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAA 324
                                                                                             LeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSer 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.24e-170
1793.00
97.75%
96.07%
89.52%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PATTERNS
                                                                                                                                                                             106
                                                                                                                                                                                                                                                                                                                                                                                                                                                            144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1080
                                                                                                                                                                                                                                                                                                                                       66
                                                                                                                                                                                                                                                                                                                                                                                                                       46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                         APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
ITITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/09/918,715
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-01
PRIOR PRILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
NUMBER: 60/282,850
PRIOR PILING DATE: 2000-04-11
NUMBER: 60/282,850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 14
US-09-918-715-301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                  Alignment Scores:
Pred. No.:
                                                                             ; ORGANISM: Mouse US-09-918-715-301
                                                                                                                  SOFTWARE: FASTSEQ 1; SEQ ID NO 301; LENGTH: 562; TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 301, Applica Publication No. US200 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               685 TCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    745 GCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTCAATGAGACACAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGluPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValLeuPheLeuLeuAlaLeuAlaLeuLeuTrpTrpPheTrpProLeuCysCysThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheileSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/09918715
o. US20030017157A1
                                                                                                                                                                                 for Windows Version
4.24e-170
1793.00
  Length:
Matches:
    562
342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            186
```

Score:

밁 S

밁 á 밁 S S 밁 á 문 ş 밁 र्

밁

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                      밁
                                                                                                                                                                                                  밁
                                                                                                                                                                                                             S
                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-1_COPY_104_1207 (1-1104)
       ð
                      8
                                 S
                                                  밁
                                                              ঠ
                                                                            밁
                                                                                          ş
                                                                                                            밁
                                                                                                                       5
                                                                                                                                                    S
                                                                                                                                                                     밁
                                                                                                                                                                                S
                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                       δ
                                                                 865
                                                                                              805
                                                                                                            247
                                                                                                                                                        589
                                                                                                                                                                                     625
                                                                                                                                                                                                   187
                                                                                                                                                                                                                 565
                                                                                                                                                                                                                                167
                                                                                                                                                                                                                                              505
                                                                                                                                                                                                                                                            147
                                                                                                                                                                                                                                                                           445
                                                                                                                                                                                                                                                                                          127
                                                                                                                                                                                                                                                                                                       385
        985
                      307
                                                  287
                                                                                267
                                                                                                                           745
                                                                                                                                         227
                                                                                                                                                                      207
                                                                                                                                                                                                                                                                                                                       107
                                                                                                                                                                                                                                                                                                                                    325
                                                                                                                                                                                                                                                                                                                                                                 265
                                                                                                                                                                                                                                                                                                                                                                                              205
                                                                                                                                                                                                                                                                                                                                                                                                                           145
                                                                                                                                                                                                                                                                                                                                                   87
                                                                                                                                                                                                                                                                                                                                                                                67
                                                                                                                                                                                                                                                                                                                                                                                                            47
                                                                                                                                                                                                                                                                                                                                                                                                                                         27
                                                                                                                                                                                                                                                                                                                                                                                                                                                       85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7
                                                                               GlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGluPro
                                                                                                                                                                                                                                                                                       TCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTG
                                                  GCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAAT
                                                                                                                                                                               CAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCA
                                                                                                                                                                                                  AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu
                                                                                                                                                                                                           GCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGACGGCTTTTCAGGCTCTG
                                                                                                                                                                                                                                ArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGlnLeu
                                                                                                                                                                                                                                               CGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTCAATGAGACACAGCTG
                                                                                                                                                                                                                                                            LeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSer
                                                                                                                                                                                                                                                                                                                              GlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGlu
                                                                                                                                                                                                                                                                                                                                                          GGAACAACCTTAATGAAACTGACAGAGAAGACAGAGAAAATCCGTCAAGGCCTAGAAGAA
                                                                                                                                                                                                                                                                                                                                                                              TTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCACCCGA
                                                                                                                                                                                                                                                                                                                                                                                                            LeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                           TTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    crceecarceecrrccaereecrcrcrrreeccacreerecrercreecceceecaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97.75%
96.07%
89.52%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   x US-09-918-715-301 (1-562)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0000
                                                                                                                                                                                                                                                                                          146
         1044
                                                                                286
                                                                                               864
                                                                                                             266
                                                                                                                                         246
                                                                                                                                                                                     684
                                                                                                                                                                                                   206
                                                                                                                                                                                                                                 186
                                                                                                                                                                                                                                              564
                                                                                                                                                                                                                                                                                                        444
                                                                                                                                                                                                                                                                                                                       126
                                                                                                                                                                                                                                                                                                                                     384
                                                                                                                                                                                                                                                                                                                                                   106
                                                                                                                                                                                                                                                                                                                                                                 324
                                                                                                                                                                                                                                                                                                                                                                                86
                                                                                                                                                                                                                                                                                                                                                                                              264
                                                                                                                                                                                                                                                                                                                                                                                                            66
                                    984
                                                   306
                                                                 924
                                                                                                                           804
                                                                                                                                                        744
                                                                                                                                                                       226
                                                                                                                                                                                                                 624
                                                                                                                                                                                                                                                             166
                                                                                                                                                                                                                                                                                                                                                                                                                            204
                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 15
US-10-474-794-194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                8
                                                                                              멍
                                                                                                           Ś
                                                                                                                                      5
                                                                                                                                                        밁
                                                                                                                                                                  Ş
                                                                                                                                                                                    밁
                                                                                                                                                                                                S
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                  δ
                                    В
                                                                 밁
                                                                            δ
                                                                                                                            밁
                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                       ; ORGANISM: Mus musculus US-10-474-794-194
                                                                                                                                                                                                                                                                                          Score:
                       445
                                                                  107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           347
                                                                                                             265
                                                                                                                                         205
                                                                                                                                                                       145
                                                                                               87
                                                                                                                           67
                                                                                                                                                        47
                                                                                                                                                                                                   85
                                                                                                                                                                                     27
                                                                                                                                                                                                                                 25
                                                                                                                                                                                                                   7
         ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSer
```

```
Sequence 194, Application US/10474794

Publication No. US20040213793A1

GENERAL INFORMATION:
APPLICANT: Carson-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: Kygelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107,00179

CURRENT APPLICATION NUMBER: US/10/474,794

CURRENT APPLICATION NUMBER: 003-10-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
SOFTWARE: FASUSEQ for Windows Version 4
SEQ ID NO 194
LENGTH: 562
TYPE: PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-474-794-194 (1-562)
                                                                                                                                                                                                                                                                                                                                                                           CTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACTCTGGTGCTCATCTGCGCCGGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VallleIleLysGluValProProProProValGluGluSerGluGlu
                                                                                                                                                                                                                                                                                                            LeuGlyAlaGlyLeuArgGlyLeuCysValAlaAlaLeuValLeuValCysAlaGlyHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAA 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ValLeuPheLeuLeuAlaLeuAlaLeuLeuTrpTrpPheTrpProLeuCysCysThr
                                         LeuAlaHisArgPheIleSerProGlnLeuArgMetSerPheIleValPheSerThrArg
                                                                                                                                                                                                                                                            TTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCACCGA
GlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGlu
                                                                                                                                                                                                             GGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.24e-170
1793.00
97.75%
96.07%
89.52%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PATTERNS
                                                                                                                                                                                                                                              98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 346
                                                146
                                                                                                                 126
                                                                                                                                                384
                                                                                                                                                                              106
                                                                                                                                                                                                               324
                                                                                                                                                                                                                                                                                264
                                                                                                                                                                                                                                                                                                                 66
                                                                                                                                                                                                                                                                                                                                                204
                                                                                                                                                                                                                                                                                                                                                                                  46
                                                                                                                                                                                                                                                                                                                                                                                                               144
                                                                                                                                                                                                                                                                                                                                                                                                                                                26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                84
                 504
                                                                                444
```

Search Job tim	문	Ś	망	Ş	문	Ş	문	ş	망	φ	망	ş	문	Ś	뭥	Ş	뭥	Ş	문	Ş
ch completed: time : 176.732	347	1045	327	985	307	925	287	865	267	805	247	745	227	685	207	625	187	565	167	505
sted: December 14, 2005, 12:55:03 76.732 secs	ValileileLysGluValProProProProValGluGluSerGluGlu 362	GTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAA 1092	valLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrpTrpPheTrpProLeuCysCysThr 346	ATCCTGTTCCTGCTCCTAGCCCTGGCTCCTCTGGTGGTTCTGGCCCCTCTGCTGCACT	SerVallleIleThrThrHisCysSerAspGlySerIleLeuAlaIleAlaLeuLeu 326	TCTGTCATCATCACCACCACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTG 984	valGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSerSer 306	GTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTTTTTATCTCCAGT 924	GluLysProPheAlaValGluAspThrTyrLeuLeuCysProAlaProIleLeuLysGlu 2	GAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAA 6	AlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeuAsn 266	GCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAAT 804	SerThrIleCysAlaGlyGluSerPheGlnValValArgGlyAsnGlyPheArgHis 2	TCCACCATATGTGCAGGAGAGTCAT	GlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGluPro 226	CAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCA 684	AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu 206	GCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTG 624	ArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGlnLeu 186	CGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAGCTG 564
			6	1044	96	4	8	.4	86	64	99	)4	246	44.	9	4	ฐ	4	ดั	4



Mon

```
Command line parameters:

-MODEL-frame+ n2p.model -DEV=xlp
-MODEL-frame+ n2p.model -DEV=xlp
-Q=/Ggn2 1/USPTO.gpool p/US09970076/runat 14122005 110512 26598/app query.fasta 1.2894
-DB=PublIshed Applications AA New -QFMT=fastan -SUFFIX=rapbn -MINMATCH=0.1
-LOOPEXT=0 -UNITS=blts -TRART=1 = END=-1 -MATRIX=blosum62
-TRANUS=human40.cd1 -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MXX=100
-THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXELN=200000000 -USER=US09970076 @CGN 1 1 @runat 14122005 110512 26598
-NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NCE SCORES-0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV TIMEDUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGĀPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Run on:
                                                                                                                                                                                                                                                                                Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database :
                                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                145.5
134.5
113.5
113.5
113.5
113.5
113.5
                                                                                                                                                                                                                                                             Score
                                                                                                                                                                                                               1894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Published_Applications_AA_New:*

1: /cgn2_6/ptcodata/1/pubpaa/US09_NEW_PUB.pep:*

2: /cgn2_6/ptcodata/1/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2_6/ptcodata/1/pubpaa/US07_NEW_PUB.pep:*

4: /cgn2_6/ptcodata/1/pubpaa/US08_NEW_PUB.pep:*

5: /cgn2_6/ptcodata/1/pubpaa/US10_NEW_PUB.pep:*

6: /cgn2_6/ptcodata/1/pubpaa/US11_NEW_PUB.pep:*

7: /cgn2_6/ptcodata/1/pubpaa/US11_NEW_PUB.pep:*

8: /cgn2_6/ptcodata/1/pubpaa/US01_NEW_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  December 14, 2005, 11:59:39; Search time 5.69976 Seconds (without alignments) 2608.649 Million cell updates/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-1_COPY_104_1207
2003
                                                                                                                                                                                                                                                           Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51441 seqs, 6734002 residues
    94.
6.7
5.7
5.7
5.7
5.5
7.7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atggccacggcggagcggag.....
                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            using frame_plus_n2p model
                                                                                                                                                                                                                                                               멾
US-11-186-284-199
US-11-186-284-26
US-11-186-284-26
US-11-057-047-2
US-11-057-047-1
US-10-821-234-1034
US-10-131-826A-294
US-10-601-368-22
                                                                                                                                                                                                                                                             H
                                                                                                                                                                                                                                                                                                                                 SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .gtgaggaaaataaaataaaa 1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           102882
Sequence 199, App
Sequence 4, Appli
Sequence 26, Appli
Sequence 2, Appli
Sequence 1, Appli
Sequence 1034, App
Sequence 294, App
Sequence 294, Appli
Sequence 24, Appli
Sequence 24, Appli
Sequence 22, Appli
                                                                                                                                                                                                                                                               Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cell updates/sec
```

4 4 5 4	43	42	41	40	39	38	37	36	35	ω 4.	ω ω	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11
78 77.5	78	78	79.5	80	80	80	81	81	٠	ÚΠ	85.5		90.5	91	94	94	94.5	95	t D	95.5	10	100	103.5	2	2	104.5	107	107	107	107	107		111
 	4.0	•	•	٠		4.1		٠	4.2	4.3			5														•				ъ	•	
3433 319	266	237	904	3689	734	237	3704	1804	730	1798	1798	1062	436	1167	448	353	627	1167	1196	1179	182	678	182	1019	918	828	1188	1188	18	1166	4	761	1188
თ თ	0	σ	σ	7	7	σ	σ	σ	7	σ						7	δ	7	σ	7	Q	7	σ	Φ	9	σ	7	7	σ	σ	σ	7	σ
US-10-714-781A-67 US-10-793-626-1040	-10-884-730-12	-10-884-73	-10-507-2	-11-075-18	-093-27	-10-884-7	-10-513-786-	-10-513-786-	-11-082-389-	-10-995-561-103	0-995-561-	-11-137-465-	-11-116-939-	-10-601-36	-11-137-465-4	-11-137-465-4	-10-467-	-11-097-125-	-10-995-561-	-11-097-125-1	-10-601-36	1-102-24	-10-601-368	-10-995-561	-10-995-561	0-995-561-9	-11-000-463	-11-000-463-3	-10-601-368-	-10-601-368	-10-601-3	1-057-047-	-10-601-368-
1040	121,	120	5, Ag	4.	40,	e 175	e 1,	'n	e 35	100	10	43	9	18,	45	44	54	2	921	1,	7,	34	Sequence 25, Appl	983	981	983,	810,	338	3, Ar	4	6,	6,	'n

## ALIGNMENTS

RESULT 1 US-11-186-284-199

ი ი

იი

```
Sequence 199, Application US/11186284
Publication No. US2005026493A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Berger, Allison
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Schlegel, Robert
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPMO1-029PZRNM
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER
```

AND

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                      밁
                                    Ś
                                                                                밁
                                                                                             δ
                                                                                                              밁
                                                                                                                                           밁
                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                   밁
                                                                 S
                                                                                                                         ঠ
                                                                                                                                                        Ś
                                                                                                                                                                        밁
                                                                                                                                                                                   S
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-1_COPY_104_1207 (1-1104)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
Pred. No.:
                                                                                                                             661
                                                                                                                                                           601
                                                                                                                                                                         181
                                                                                                                                                                                       541
                                                                                                                                                                                                       161
                                                                                                                                                                                                                                    141
                                                   261
                                                                  781
                                                                                 241
                                                                                               721
                                                                                                               221
                                                                                                                                            201
                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                       41
                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                    21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ,_
                                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                 CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                         GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                      LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                 ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                         GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                IleGluIleLeuAlaAlaGluProSerThrIleCy8AlaGlyGluSerPheGlnValVal
                                                                                                                        ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                        LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                 AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                      SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                             TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                      CysProAlaProTleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.18e-175
1894.00
100.00%
100.00%
100.00%
94.56%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               x US-11-186-284-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (1-564)
                                                                                                                                                                                                       180
                                     900
                                                    280
                                                                  840
                                                                                 260
                                                                                                                240
                                                                                                                                            220
                                                                                                                                                           660
                                                                                                                                                                          200
                                                                                                                                                                                        600
                                                                                                                                                                                                                                     160
                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                 140
                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                     40
                                                                                                 780
                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                 Ş
                                                                  밁
                                                                             Ś
                                                                                                밁
                                                                                                              Ş
                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 2
US-11-080-026-4
                                    밁
                                                                                                                             뮹
                                                                                                                                                           밁
                                                                                                                                                                       S
                                                                                                                                                                                                                                            Pred. No.:
                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321
                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                   200
```

```
APPLICANT: Springer, Timothy A.

APPLICANT: Springer, Timothy A.

APPLICANT: Liu, Chafen

APPLICANT: Liu, Chafen

ITITLE OF INVENTION: MODIFIED POLYPEPTIDES STABILIZED IN A

ITITLE OF INVENTION: DESIRED CONFORMATION AND METHODS FOR PROI

FILE REFERENCE: CFBP-P02-021

CURRENT APPLICATION NUMBER: US/11/080,026

CURRENT FILING DATE: 2005-03-15

PRIOR APPLICATION NUMBER: 09/945,265

PRIOR FILING DATE: 2001-08-31

FRIOR FILING DATE: 2001-09-01

NUMBER OF SEQ ID NOS: 4

SEQ ID NOS: 4

SEQ ID NOS: 4

SEQ ID NOS: 4

LENGTH: 1152

TYPE: PRT

ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-1_COPY_104_1207 (1-1104) x US-11-080-026-4 (1-1152)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 4, Application US/11080026 Publication No. US20050260192A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                         130 GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTG---CACCACTGGAATGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAGTGAGGAA 1092
                                                                                                                                                                                                                                                                                                                           TATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                |||::: |||::::::||| ||||||||||:::::: ||| ::::
|AspIleAlaPheLeuIleAspGlySerGlySerIleIleProHisAspPheArgArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAG
                                                                                                                                                                                                                                                            ATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGAC------
                                                                                                                                                                                                                                                                                                         LysGluPheValSerThr-------ValMetGluGlnLeuLysLysSerLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AspGlyLeuSerPheIleSerSerValIleIleThrThrThrHisCysSerAspGly
                                     ATTTATTATGAAAACAGACAAGGGTACAGGACAGCC---AGCGTCATCATTGCTTTGACT
                                                                        ThrLeuPheSer-----
LeuPheAsnIleThrAsnGlyAlaArgLysAsnAlaPheLysIleLeuValValIleThr
                                                                                                                                                   PheThrPheLysGluPheGlnAsnAsnProAsnProArgSerLeuValLysProIleThr
                                                                                                                                                                                           ----AGAGAACAATCCGTCAAGGCCTAGAAGAACTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.94e-06
145.50
45.85%
26.20%
7.26%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                1152
60
45
81
43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRODUCING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    340
                                                                                                                                                                                                                                  199
                                                                            237
                                                                                                                                                       219
                                                                                                                                                                                                                                                                                                           184
                                                                                                                                                                                                                                                                                                                                                246
                                                                                                                                                                                                                                                                                                                                                                                      169
                                                                                                                                                                                                                                                                                                                                                                                                                         186
     25
                                                                                                                                                                                                                                                                     294
```

```
FILE REFERENCE: MPMO1-029P2NM
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR PILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR PILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR FILING DATE: 2002-05-20
NUMBER OF SEQ ID NO 26
SOPTWARE: FRASESEQ for Windows Version 4.0
SEQ ID NO 26
LENGTH: 3063
                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            १
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-11-186-284-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                      밁
                                                       8
                                                                                          US-09-970-076-1_COPY_104_1207 (1-1104) x US-11-186-284-26 (1-3063)
                                                                                                                                                                                                                                                                                                 ; ORGANISM: Homo US-11-186-284-26
                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Millennium Pharmaceuticals, I:
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 26, Application US/11186284 Publication No. US20050266493A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION,
TITLE OF INVENTION: THERAPY OF COLON CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             295 LysSerArgGlnGluLeuAsnThrIleAlaSerLysProProArgAspHisValPheGln
                      440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGCCCGG------ATTGCGGACAGT-----AAGGATCATGTGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAG-----AGGGAGGCTAATAGG
                    GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG----CTGCACCACTGGAATGAAATC 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetSerGlnGluGlyPheSerAlaAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAGAGGAAACGGCTTCCGACATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValAsnAsn---PheGluAlaLeuLysThrIleGlnAsnGlnLeuArgGluLys-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Glu------GlyValileArgTyrValIleGlyValGlyAspAlaPheArgSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTCGAGATCTTGGTGCAATTGTTTACTGTGTGTGTGAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspGlyGluLysPheGlyAspProLeuGlyTyrGluAspValIleProGluAlaAspArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----İlePheAlaIleGluGlyThrGlnThrGlySerSerSerPheGluHisGlu
                                                                                                                                                                                                                                                                                                                     Sapiens
                                                                                                                                            2.94e-05
134.50
43.10%
27.93%
6.71%
                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
                                                                                                                                                                                                                                                                                                     US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                              Sequence 2, Application US/11057047 Publication No. US20050260198A1
                                                                                                                                                                               APPLICANT: Holers, Vernon
APPLICANT: Thurman, Josh
APPLICANT: Taube, Christ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      570 GluIlepheAlaValGlyValLysAspAlaValArgSerGluLeuGluAlaIleAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            694 TGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        553 SerSerAspAlaPhe-----ArgAspProAlaIleLysLeuArgAsnSerAspVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               460 CATGAAGATCTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              406 AGACAAGGGTACAGGACA-----GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          346 GGAGACACTTACATGCATGAAGGATTTGAAAGGGCCCAGTGAGCAGATTTATTATGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  500 ValGluAspIleIle------GluAlaIleAsnThrPheProTyrArgGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       292 GACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCA-----GGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480 SerLeuValGlnTyrSerArgAspProHisThrGluPheThrLeuLysLysPheThrLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA----CAGTTGAGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTTTATTGTTTTCTCCACC-----CGAGGAACAACCTTAATGAAACTGACAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ArgAlaPheLeuGluValLeuValLysSerPheGluIleSerProAsnArgValGlnIle
                                                                                                                                                                                                                                                                                                                                                                 rLeuLysProGluThrLeuTyrLeuVal
                                                                                                                                                                                                                                                                                                                                                                                                      ATCACCACCACACTGTTCTGACGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                           AspAspGluValThrVal---ValGluPro-AlaSerSerThrSerValValLeuSerSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATG 873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tyr-----ProAlaGlyGluAsnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCAGTCACACTCAATGAGAAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AlaIleLysLysLysAlaTyrValProProLysAspLeuSerPheSerGluValThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerPheGluLeuThrGlnSerIleCysLeuArgIle-----GluGlnGluLeuAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----AGTAAGGATCATGTGTTTCCCGTGAATGACGCTTTCAGGCTCTGCAAGGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTGTTTACTGTGTGGTGGAAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProProAlaGluThrHisValPheThrValGluAsp---PheAspAlaPheGlnArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PheSerTyrHisIleThrTyr--
                                                                                                                                                                                 Thurman, Joshua
Taube, Christian
                                                                                                                                                                                                                                                                                                                                                                   699
                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                           The
                                                                                                                           Alternative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysGluAlaAlaGly
                                                                                                                           Complement Pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      514
                                                                                                                                                                                                                                                                                                                                                                                                                                                 690
```

PRIOR APPLICATION NUMBER: 60/636,239

```
PRIOR FILING DATE: 2004-12-14
PRIOR APPLICATION NUMBER: US04/015040
PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn version 3.3
SEQ ID NO 2
LENGTH: 739
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
밁
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                            δ
                                                                 밁
                                                                                                5
                                                                                                                                  밁
                                                                                                                                                            ઇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-1_COPY_104_1207 (1-1104) x US-11-057-047-2 (1-739)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        No.:
                                                                                                                                                                                                                                                                                                       454
                                                                                                                                                                                                                                                                                                                                                                        409
                                                                                                                                                                                                                                                                                                                                                                                                          331
                                                                                                                                                                                                                                                                                                                                                                                                                                           370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 238 LeuAspProSerGlySerMetAsnIleTyrLeuValLeuAspGlySerAspSerIleGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   115 ----TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG---
                                                                                                                                  410
                                                                                                                                                                                                                                      487
                                                                                                                                                                                                                                                                      370 GlyGlyAspProIleThrValIleAspGluIleArgAspLeuLeuTyrIleGlyLysAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              296 TrpValLysValSerGluAlaAspSerSerAsnAlaAspTrpValThrLysGlnLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   218 GluGlyValAspAlaGluAspGlyHisGlyProGlyGluGlnGlnLysArgLysIleVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82 CAAGGGGACGCAGGGAGGATGGG---GGTCCAGCC-----
                                                                                                                                                                                                                                                                                                                                                                        CAAGGGTAC---AGGACAGCCAGCGTCATCATTGCTTTGACTGATGGA------
                                                                                                                                                                                                                                                                                                                                                                                                          ---LysLysAlaLeuGlnAlaValTyrSerMetMetSerTrpProAspAspValProPro
                                                                                                                                                                                                                                                                                                                                     GAACTC------CAGAAAGTTCTGCCAGGAGGACACTTACATGCATGAAGGA 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AlaSerAsnPheThrGlyAlaLysLysCysLeuValAsnLeuIleGiuLysValAlaSer
                                                                                                                                    AsnGlnValAsnIleAsnAlaLeuAlaSerLysLysAspAsnGluGlnHisValPheLys
                                                                                                                                                                 AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                               ArgLysAsnProArgGluAspTyrLeuAspValTyrValPheGlyValGlyProLeuVal
                                                                                                                                                                                                                                    AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGT-----GTG
                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GluIleAsnTyrGluAspHisLysLeuLysSerGlyThrAsnThr------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTAATGAAACTGACAGAA------GACAGAGAACAAATCCGTCAAGGCCTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TyrGlyValLysPro-----ArgTyrGlyLeuValThrTyrAlaThrTyrProLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACC
                               ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                               ValLysAsp---MetGluAsnLeuGluAspValPheTyrGlnMetIleAspGluSer---
                                                                                                  GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.00208
113.50
38.28%
19.58%
5.67%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCAC
 -GlnSerLeuSerLeuCys--
                                                                                                                                                                                                                                                                                                      ----GAACTCCATGAAGATCTCTTTTTCTATTCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         739
66
63
109
99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               321
                                                                                                                                    429
                                                                                                                                                                                                     409
                                                                                                                                                                                                                                                                        389
                                                                                                                                                                                                                                                                                                       486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      165
 453
                                                                                                                                                                                                                                                                                                                                         369
                                                                                                                                                                                                                                                                                                                                                                        453
                                                                                                                                                                                                                                                                                                                                                                                                                                           408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       114
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR PRIOR APPLICATION NUMBER: 60/636
                               밁
                                                             S
                                                                                                        밁
                                                                                                                                       S
                                                                                                                                                                             밁
                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                 US-09-970-076-1_COPY_104_1207 (1-1104) x US-11-057-047-1 (1-764)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-11-057-047-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-11-057-047-1
                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 1
LENGTH: 764
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/11057047 Publication No. US20050260198A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Holers, Vernon
APPLICANT: Thurman, Josh
APPLICANT: Taube, Christ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2004-05-13 NUMBER OF SEQ ID NOS: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn version 3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                   No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                 243 GluGlyValAspAlaGluAspGlyHisGlyProGlyGluGlnGlnLysArgLysIleVal
                                                                                                                                                                           263 LeuAspProSerGlySerMetAsnIleTyrLeuValLeuAspGlySerAspSerIleGly
                                                                                                                                                                                                                                                                                     82 CAAGGGGGACGCAGGAAGGATGGG---GGTCCAGCC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----GlyMetValTrpGluHisArgLysGlyThrAsp---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----AlavalValSerGluTyrPheValLeuThrAlaAlaHisCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG 780
TTAATGAAACTGACAGAA-----
                                                                    AAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACC
                                                                                                    alaSerAsnPheThrGlyAlaLysLysCysLeuValAsnLeuIleGluLysValAlaSer
                                                                                                                                                                                                              ----TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                           -----CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Thurman, Joshua
Taube, Christian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gelfand, Erwin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ----TyrHisLysGlnProTrpGlnAlaLysIleSerVal-----
                                                                                                                                                                                                                                                                                                                                                           0.0021
113.50
38.28%
19.58%
5.67%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleArgProSerLysGlyHisGluSerCysMetGly---
                                 ArgTyrGlyLeuValThrTyrAlaThrTyrProLysIle
                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
-GACAGAGAACAAATCCGTCAAGGCCTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alternative Complement
                                                                                                                                                                                                                                                                                                                                                           764
66
63
109
99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pathway
 321
                                     320
                                                                      273
                                                                                                           302
                                                                                                                                             213
                                                                                                                                                                                282
                                                                                                                                                                                                                  165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              464
```

```
GENERAL INFORMATION:

APPLICANT: Labat, Ivan

APPLICANT: Abet, Ivan

APPLICANT: Stache-Crain, Birgit

APPLICANT: Stache-Crain, Susan

APPLICANT: Tang, Y. Tom

TITLE OF INVENTION Methods for Diagnosis and

FILE REFERENCE: 821A

CURRENT APPLICATION NUMBER: US/10/821,234

CURRENT FILING DATE: 2004-04-07

PRIOR APPLICATION NUMBER: US 60/462,047

PRIOR PILING DATE: 2003-04-07

PRIOR FILING DATE: 2003-04-07

NUMBER OF SEQ ID NOS: 1704

SOFTWARE: pt SEQ genes Version 1.0

SEQ ID NO 1034

LENGTH: 798

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: PRI

TYPE: P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 6
US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
S
                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1034, Application US/10821234 Publication No. US20050255114A1
ORGANISM: Homo sapiens -10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ---LysLysAlaLeuGlnAlaValTyrSerMetMetSerTrpProAspAspValProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                :::|||::::::|||
TrpValLysValSerGluAlaAspSerSerAsnAlaAspTrpValThrLysGlnLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgLysAsnProArgGluAspTyrLeuAspValTyrValPheGlyValGlyProLeuVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluIleAsnTyrGluAspHisLysLeuLysSerGlyThrAsnThr-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTC-----CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANAGATTTCANTGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlyGlyAspProIleThrValIleAspGluIleArgAspLeuLeuTyrIleGlyLysAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGGGTAC---AGGACAGCCAGCGTCATCATTGCTTTGACTGATGGA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----AlaValValSerGluTyrPheValLeuThrAlaAlaHisCys 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTCCAGCGCCTATCTTAMAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----GlyMetValTrpGluHisArgLysGlyThrAsp------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValLysAsp---MetGluAsnLeuGluAspValPheTyrGlnMetIleAspGluSer---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AsnGlnValAsnIleAsnAlaLeuAlaSerLysLysAspAsnGluGlnHisValPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----IleArgProSerLysGlyHisGluSerCysMetGly-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -------GlnSerLeuSerLeuCys------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---TyrHisLysGlnProTrpGlnAlaLysIleSerVal-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ------gaactccatgaagatctctttttctattcagag
                                                                                                                                                                                                                                                                                           and
                                                                                                                                                                                                                                                                                           Treatment
                                                                                                                                                                                                                                                                                         of.
                                                                                                                                                                                                                                                                                           Preeclampsia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores: Pred. No.:
                                                                                                           5
                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 355 TrpValLysValSerGluAlaAspSerSerAsnAlaAspTrpValThrLysGlnLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         277 GluGlyValAspAlaGluAspGlyHisGlyProGlyGluGlnGlnLysArgLysIleVal
                                                                                                                                                                                                                                                                                                                                                                 489
                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlyGlyAspProIleThrValIleAspGluIleArgAspLeuLeuTyrIleGlyLysAsp 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAGGGTAC---AGGACAGCCAGCGTCATCATTGCTTTGACTGATGGA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluIleAsnTyrGluAspHisLysLeuLysSerGlyThrAsnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTAATGAAACTGACAGAA------GACAGAGAACAAATCCGTCAAGGCCTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAGGGGGACGCAGGGAGGATGGG---GGTCCAGCC-----
TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                          GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ArgLysAsnProArgGluAspTyrLeuAspValTyrValPheGlyValGlyProLeuVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGT-----GTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---LysLysAlaLeuGlnAlaValTyrSerMetMetSerTrpProAspAspValProPro 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAACTC-----CAGAAAGTTCTGCCAGGAGGAGACACTTACATGCATGAAGGA 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TyrGlyValLysPro-----ArgTyrGlyLeuValThrTyrAlaThrTyrProLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AlaSerAsnPheThrGlyAlaLysLysCysLeuValAsnLeuIleĠiuLysValAiaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----CTGCACCACTGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCAC 213
                                                                                                                                                                                                                     GTGAGAGGAAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                               ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                            AsnGlnValAsnIleAsnAlaLeuAlaSerLysLysAspAsnGluGlnHisValPheLys
                                                                                                                                                                   ----GlyMetValTrpGluHisArgLysGlyThrAsp----
                                                                                                                                                                                                                                                                     :::::::|
|------GlnSerLeuSerLeuC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.00213
113.50
38.28%
19.58%
5.67%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ------GAACTCCATGAAGATCTCTTTTTCTATTCAGAG 486
                                                                           -TyrHisLysGlnProTrpGlnAlaLysIleSerVal-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           798
66
63
109
99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (1-798)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           389
                                                                                                                                                                                                                                                                                                                                                                      506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            453
```

240

405

133

150 450

186

170 510

564

345

96 285 113

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                    Ś
                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-131-826A-294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                        US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-131-826A-294 (1-915)
                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                 ; ORGANISM: Homo US-10-131-826A-294
                                                                                                                                                                                                                                                                                                                        SEQ ID NO 294
LENGTH: 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 294, Appublication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC FITTLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3330R1C128 CURRENT APPLICATION NUMBER: US/10/131,826A CURRENT FILING DATE: 2002-04-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                  Remaining Prior Application NUMBER OF SEQ ID NOS: 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                       No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/059113
FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/059184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/059117 FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/059115
FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/059352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1997-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/059122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     536
130 GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG---CTGCACCACCGGAATGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATGGCCTCTCTTTATCTCCAGTTCTGTCATCACCACCACCACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhang, Zemin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Watanabe, Colin K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tumas,Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sherwood, Steven Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DeForge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Beresini, Maureen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/10131826A
o. US20050245730A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----IleArgProSerLysGlyHisGluSerCysMetGly-----
                                                                                                                                                                                                                                                                                    Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       --AlaValValSerGluTyrPheValLeuThrAlaAlaHisCys 561
                                                                                                      0.00221
113.50
43.90%
22.36%
5.67%
                                                                                                                                                                                                                                                                                                                                                                                       data removed
                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                     See File Wrapper or
                                                                                                    915
53
53
103
13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 951
                       186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 8
US-11-113-424-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              닭
                                                                             PRIOR APPLICATION NUMBER: 60/311,590
PRIOR FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: 60/257,314
PRIOR FILING DATE: 2000-12-20
PRIOR APPLICATION NUMBER: 60/311,613
PRIOR FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: 60/315,617
                                                                                                                                                                                                                                                                                                                                                                Sequence 39, Application No. US20
Publication No. US20
GENERAL INFORMATION
                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/11/113,424
CURRENT FILING DATE: 2005-04-21
PRIOR APPLICATION NUMBER: 60/256,704
PRIOR FILING DATE: 2000-12-19
                                                                                                                                                                                                                                                                                                       APPLICANT: Gangolli et al.
TITLE OF INVENTION: Polypeptides and Nucleic
FILE REFERENCE: 21402-225
                       PRIOR
PRIOR
PRIOR
                                                                           APPLICATION NUMBER: 60/257,314
FILING DATE: 2000-12-20
APPLICATION NUMBER: 60/311,613
FILING DATE: 2001-08-10
APPLICATION NUMBER: 60/315,617
                       FILING DATE: 2001-08-29
APPLICATION NUMBER: 60/307,506
FILING DATE: 2001-07-24
    APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 790 TCGGTCACACTCAATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             745 GCCCGC------AACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     246 GluHisAsnCysAla-----HisPheCysIleAsnIleProGlySerTyrValCysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             685 TCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    226 GluThrLeuThrSerValPheGlnLysLysLeuCysThrAlaHisMetCysSerThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            625 CAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    207 IleGlySerGluProHisGluAspHisValPheLeuValAlaAsn---PheSerGlnIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       511 CTTGGTGCAATTGTTTACTGTGTTGGTGTG-----AAAGATTTCAATGAGACACAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     406 AGACAAGGGTACAGG-------ACAGCCAGCGTCATCATTGCTTTGACTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        114 PheLysArgLysSerGluValGluArgAlaValLysArgMetArgHisLeuSerThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  286 ACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       282 LeuCysAlaMetGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     77 LysGluPheIleValAspIleLeuGlnPheLeuAspIleGlyProAspValThrArgVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CysLysGlnGlyTyrIleLeuAsnSerAspGlnThrThrCys-----ArgIleGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AlaGluGlyAlaArgProLeuArgGluAsnValProArgValIleMetIleValThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTA-----ATGAAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrGlyIleLeuIlePheAlaIleGlyValGlyGlnValAspPheAsnThrLeuLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlyArgProGlnAspSerVal------AlaGluValAlaAlaLysAlaArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrMetThrGlyLeuAlaIleGlnTyr-----AlaLeuAsnIleAlaPheSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyLeuLeuGlnTyr-----GlySerThrValLysAsnGluPheSerLeuLysThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATTACTTT----GTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTG----AGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspLeuValPheIleIleAspSerSerArgSerValAsnThrHisAspTyrAlaLysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/11113424
No. US20050260713A1
    NUMBER: 60/322,358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   807
                                                                                                                                                                                                                                                                                                                            Acids Encoding
                                                                                                                                                                                                                                                                                                                                Same
```

263 789

281

206 624 225 684

```
; LENGTH: 956
; TYPE: PRT
; ORGANISM: Homo s
US-11-113-424-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 2001-09-14
PRIOR APPLICATION NUMBER: 60/294,075
PRIOR APPLICATION NUMBER: 60/288,153
PRIOR APPLICATION NUMBER: 60/288,153
PRIOR FILING DATE: 2001-05-02
NUMBER OF SEQ ID NOS: 190
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-1_COPY_104_1207 (1-1104) x US-11-113-424-39 (1-956)
                 S
                                                      문
                                                                                     ঠ
                                                                                                                             밁
                                                                                                                                                                                                 문
                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     130 GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTG----CTGCACCACTGGAATGAAATC 186
                                                                                                                                                                                                                                                                                                                                                      187
                                                                                                                                                                                                                                                                                                                                                                                        511
                                                                                                                                                                                                                                                                                                                                                                                                                               171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           187
                                                                                                                               246
                                                                                                                                                                                                                                                                              207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATTACTTT---GTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTG---AGAATG 240
                                                                                                                                                                                                                      CAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCCTAGCAGCTGAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                             GlyArgProGlnAspSerVal-----AlaGluValAlaAlaLysAlaArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrMetThrGlyLeuAlaIleGlnTyr-----AlaLeuAsnIleAlaPheSerGlu 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PheLysArgLysSerGluValGluArgAlaValLysArgMetArgHisLeuSerThrGly 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGA 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTA------ATGAAACTG 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysGluPheIleValAspIleLeuGlnPheLeuAspIleGlyProAspValThrArgVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspLeuValPheIleIleAspSerSerArgSerValAsnThrHisAspTyrAlaLysVal
                 TCGGTCACACTCAATGAG
                                                      CysLysGlnGlyTyrIleLeuAsnSerAspGlnThrThrCys-----ArgIleGlnAsp
                                                                                                                             GluHisAsnCysAla-----HisPheCysIleAsnIleProGlySerTyrValCysArg
                                                                                                                                                              TCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACAT
                                                                                                                                                                                                     GluThrLeuThrSerValPheGlnLysLysLeuCysThrAlaHisMetCysSerThrLeu
                                                                                                                                                                                                                                                                                                   GCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCTCTG 624
                                                                                                                                                                                                                                                                                                                                                      ThrGlyIleLeuIlePheAlaIleGlyValGlyGlnValAspPheAsnThrLeuLysSer 206
                                                                                                                                                                                                                                                                                                                                                                                      CTTGGTGCAATTGTTTACTGTGTTGGTGTG-----AAAGATTTCAATGAGACACAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGACAAGGGTACAGG------ACAGCCAGCGTCATCATTGCTTTGACTGAT 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlyLeuLeuGlnTyr------GlySerThrValLysAsnGluPheSerLeuLysThr 113
                                                                                      GCCCGC-----AACGTGGACAGGTCCTCTGCAGCTTCAAGATCAATGAC 789
                                                                                                                                                                                                                                                                            IleGlySerGluProHisGluAspHisValPheLeuValAlaAsn---PheSerGlnIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.00224
113.50
43.90%
22.36%
5.67%
                   807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            956
53
103
35
                                                                                                                                                                                                                                                                                                                                                                                                                             186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76
                                                        281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
US-10-601-368-24
                                                                                   8
                                                                                                                                                        δ
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-601-368-24 (1-1141)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-601-368-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: FastSEQ for Windows SEQ ID NO 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 24, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: LOTA, JÖBE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 2000-04-27
PRIOR PHILING DATE: 1999-05-28
PRIOR PHILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 1141
TYPE: PRT
ORGANISM: Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             No.:
                                                                                                                                                                                                                                                                                                                                                                                            349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  178
                     562
                                                                                                                                                                                                        275
                                                                                                                                                                                                                                                                                257
                                                                                                                                                                                                                                                                                                                   400
                                                                                                                                                                                                                                                                                                                                                        237
                                                                                                                                                                                                                                                                                                                                                                                                                               217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      282 LeuCysAlaMetGluAsp
                                                                                                                                                                    469
                                                                                                                                                                                                                                                                            GlyGlyArgLyBGlyAlaLys-----LysValMetIleValIleThrAspGlyGluSer
                                                                                                                                                                                                                                                                                                                 GAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                          GACACTTACATGCATGAAGGATTTGAA-----AGGGCCAGTGAGCAGATTTATTAT 399
                                                                                                                                                                                                                                                                                                                                                                                                                               AsnAspTyrArgSerValLysAspValValGluAlaAlaSerHisIleGluGlnArgGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGA 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TrpValGluValGlnHisPheLeuIleAsnIleLeuLysLysPheTyrIleGlyProGly 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysGlnThrTyrMetAspIleVallleValLeuAspGlySerAsnSerIle---TyrPro 177
CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGGTGAATGACGGCTTTCAGGCT 621
                                                      AsnGluIleLysTyrIleAlaSerAspProAspAspLysHisPhePheAsnValThrAsp 334
                                                                                                                                                                                                     HisAspSerProAspLeuGluLysValIleArgGlnSerGluLysAspAsnValThrArg 294
                                                                                                                                                                                                                                                                                                                                                      GlyThrGluThrArgThrAlaPheGlyIleGluPheAlaArgSerGluAlaPheGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GinIleGlnValGlyIleValGlnTyrGlyGluAspAlaValHisGluPheHisLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACA 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCAC
                                                                                            GGTGCAATTGTTTACTGTGTTGGTGTGAAAGAT
                                                                                                                               TyrAlaValAlaValLeuGlyTyrTyrAsnArgArgGlyIleAsnProGluThrPheLeu 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.0041
111.00
37.93%
24.14%
5.54%
                                                                                                                                                                    CTCTTTTTCTATTCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1141
49
28
88
38
                                                                                              -TTCAATGAGACACAG
```

513

468

459

236

Ş

В

밁

```
Sequence 22, Application US/10601368

Publication No. US20050260702A1

GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Pan, Yang
APPLICANT: LOTA, JOSE M.

TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001

CURRENT APPLICATION NUMBER: US/10/601,368

CURRENT FILING DATE: 2003-06-23

PRIOR APPLICATION NUMBER: US/09/561,263A

PRIOR APPLICATION NUMBER: US 09/322,790

PRIOR APPLICATION NUMBER: US 09/322,790

PRIOR FILING DATE: 1999-05-28

NUMBER: OF SEQ ID NOS: 40

SOFTWARE: FastSEQ for Windows Version 3.0

LENGTH: 1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-601-368-22 (1-1166)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Mus musculus 
US-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
0
::
                                                                                                                                                                                                                                                                                                                                          349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            156 TrpValGluValGlnHisPheLeuIleAsnIleLeuLysLysPheTyrIleGlyProGly 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             335
                                                                                                469
                                                                                                                                     253
                                                                                                                                                                             460
                                                                                                                                                                                                                     235
                                                                                                                                                                                                                                                               400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 115 TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCAC
                  514 GGTGCAATTGTTTACTGTGTTGGTGAAAGAT-----
                                                                                                                                                                                                                                                                                                                                                                                  195 AsnAspTyrArgSerValLysAspValValGluAlaAlaSerHisIleGluGlnArgGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 352 LeuGluGly 354
                                                                                                                                                                                                                 GlyGlyArgLysGlyAlaLys-----LysValMetileVallleThrAspGlyGluSer 252
                                                                                                                                     HisAspSerProAspLeuGluLysValIleArgGlnSerGluLysAspAsnValThrArg
                                                                                                                                                                               CATGAAGAT
                                                                                                                                                                                                                                                               GAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTTGACTGATGGAGAACTC
                                                                                                                                                                                                                                                                                                  GlyThrGluThrArgThrAlaPheGlyIleGluPheAlaArgSerGluAlaPheGlnLys
                                                                                                                                                                                                                                                                                                                                          GACACTTACATGCATGAAGGATTTGAA-----AGGGCCAGTGAGCAGATTTATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                         GAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGA 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnIleGlnValGlyIleValGlnTyrGlyGluAspAlaValHisGluPheHisLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACA 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CysGlnThrTyrMetAspIleVallleValLeuAspGlySerAsnSerIle---TyrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CIGCAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluAlaAlaLeu---
                                                        TyrAlaValAlaValLeuGlyTyrTyrAsnArgArgGlyIleAsnProGluThrPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.00412
111.00
37.93%
24.14%
5.54%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       630
                                                                                                CTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ----LysAspIleValAspAlaLeuGlyAspArgIlePheSer 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1166
49
28
88
38
                    TTCAATGAGACACAG
                                                                                                                                       272
                                                                                                                                                                             468
                                                                                                                                                                                                                                                               459
                                                                                                                                                                                                                                                                                                      234
                                                                                                                                                                                                                                                                                                                                                                                  214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      174
                                                                                                513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                             5
                                                                             片
                                                                                                              S
                                                                                                                                                            맑
                                                                                                                                                                                              S
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-601-368-21 (1-1188)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; LOCATION: (1)...(22) US-10-601-368-21
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멺:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 1188
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                       622 CTGCAAGGC 630
|||:::|||
330 LeuGluGly 332
                                                                                                                                                                                                                                                                                                                       198 GlnIleGlnValGlyIleValGlnTyrGlyGluAspAlaValHisGluPheHisLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                              175 TGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    115 TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCAC 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313 GluAlaAlaLeu------LysAspIleValAspAlaLeuGlyAspArgIlePheSer 329
                                       460 CATGAAGAT-----
                                                                           257 GlyGlyArgLysGlyAlaLys-----LysValMetileValIleThrAspGlyGluSer
                                                                                                                                                                                                  349 GACACTTACATGCATGAAGGATTTGAA-----AGGGCCAGTGAGCAGATTTATTAT
                                                                                                                                                                                                                                          217 AsnAspTyrArgSerValLysAspValValGluAlaAlaSerHisIleGluGlnArgGly
                                                                                                                                                                                                                                                                               289 GAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGA
                                                                                                                                                                                                                                                                                                                                                               229 CAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             293 AgnGluIleLygTyrIleAlaSerAgpProAgpAgpLygHigPhePheAgnValThrAgp
HisAspSerProAspLeuGluLysValIleArgGlnSerGluLysAspAsnValThrArg
                                                                                                                                                          GlyThrGluThrArgThrAlaPheGlyIleGluPheAlaArgSerGluAlaPheGlnLys
                                                                                                                   GAMMACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTC 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.00415
111.00
37.93%
24.14%
5.54%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1188
49
28
88
38
                                                                                                                                                              256
                                                                                                                                                                                                      399
                                                                                                                                                                                                                                            236
                                                                                                                                                                                                                                                                                    348
                                                                                                                                                                                                                                                                                                                           216
                                                                                                                                                                                                                                                                                                                                                                   288
                                                                                                                                                                                                                                                                                                                                                                                                                                                228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 312
    294
                                         468
                                                                                 274
```

Ś

Ş

밁 δ 밁 ફ

밁

밁

δ

밁

5 밁 Ś 밁 ঠ 밁

```
APPLICANT: Gikeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The Alternative Complement Pathway and
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR FILING DATE: 2004-02-10
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR FILING DATE: 2004-12-14
PRIOR APPLICATION NUMBER: 80/636,239
PRIOR APPLICATION NUMBER: 10/636,239
PRIOR FILING DATE: 2004-05-13
NUMBER: 0F 5EQ ID NOS: 6
SOFTWARE: Patentin version 3.3
SEQ ID NO 6
LENGTH: 761
TYPE: PRIOR PRIOR FILING PATE: 2004-05-13
NUMBER: PATENTALE: PATENTIN VERSION 3.3
                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
US-11-057-047-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                            밁
                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
  ঠ
                                      밁
                                                                        5
                                                                                                                  밁
                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                               US-09-970-076-1_COPY_104_1207 (1-1104) x US-11-057-047-6 (1-761)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Mus
US-11-057-047-6
                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/11057047 Publication No. US20050260198A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Holers, Vernon APPLICANT: Thurman, Joshua
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     352
    250
                                        293
                                                                                                                    278
                                                                                                                                                        163
                                                                                                                                                                                              260
                                                                                                                                                                                                                                                                     GluGlyAlaAspAlaGluAspGlyHisSerProGlyGluGlnGlnLysArgLysIleVal 259
                                                                                                                                                                                                                                                                                                             CAAGGGGACGCAGGGAGGATGGG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCAAGGC 630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluAlaAlaLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnGluIleLysTyrIleAlaSerAspProAspAspLysHisPhePheAsnValThrAsp 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TyrAlaValAlaValLeuGlyTyrTyrAsnArgArgGlyTleAsnProGluThrPheLeu
                                                                                                                                                                                                                                     ---GGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGT 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTGCAATTGTTTACTGTGTGTGTGAAAGAT-----TTCAATGAGACACAG 561
                                    ---LeulleGluLysValAlaSerTyrGlyValArgPro----ArgTyrGlyLeuLeu
                                                                                                                                                                                            LeuAspProSer-----GlySerMetAsnIleTyrLeuValLeuAspGlySerAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuGluGly 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGA------
                                                                                                                  IleGlySerSerAsnPheThrGlyAlaLysArgCysLeuThrAsn------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gelfand, Erwin
Gilkeson, Gary
                                                                            TACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Thurman, Joshua
Taube, Christian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  musculus
                                                                                                                                                                                                                                                                                                                                                                                           0.00408
110.50
37.57%
20.52%
5.52%
7

    LysAspIleValAspAlaLeuGlyAspArgIlePheSer

                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative:
                                                                                                                                                      ----CTGCACCACTGGAATGAAATCTAT
                                                                                                                                                                                                                                                                                                                                                                                         761
71
59
99
117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      314
                                          309
                                                                                249
                                                                                                                                                          189
                                                                                                                                                                                                277
                                                                                                                                                                                                                                                                                                                 105
                                                                                                                    292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 199-05-28
VUMBER OF SEQ ID NOS: 40
SOFTMARE: FastSEQ for Windows Version 3.0
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                               RESULT 13
US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                     Sequence 6, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                          APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT
FILE REFERENCE: 07334-275001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                330 AspTrpValThrGluLysLeuAsnGlnIleSerTyrGluAspHisLysLeuLysSerGly 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ||||:::::::||||
310 ThrTyrAlaThrValProLysValLeuValArgValSerAspGluArgSerSerAspAla 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  574 GCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATC 633
                                                                                                                                                                                                                                                                                                                                                                                                                 934 ATCACCACCACACACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AsnAspTyrHisLysGlnProTrpGlnAlaLysIleServalThr-----ArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAGAGCCC 813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PheTyrGlnMetIleAspGluThr----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysAspAsnGluHisHisValPheLysValLysAsp---MetGluAspLeuGluAsnVal 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TyrvalPheGlyValGlyProLeuValAspSerValAsnIleAsnAlaLeuAlaSerLys 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTGTTTACTGTGTTGGT-----GTGAAAGATTTCAATGAGACACAGCTGGCCCGGATT 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ArgAlaLeuLeuAspIleGlyArgAspProLysAsnProArgGluAspTyrLeuAspVal 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             :::||||||| || || :::
| HetThrAspGly---LeuHisAsnMetGlyGlyAsnProValThrValIleGlnAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGACTGATGGAGAACTCCAT----------GAAGATCTC 471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerTrpAlaGlyAspAlaProProGluGlyTrpAsnArgThrArgHisValileIleIle 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   :::|||
ThrAsnThr-------LysArgAlaLeuGlnAlaValTyrSerMetMet 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAGACACTTACATGCATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTAT-----
                                                                                                                                                                                                                                                                                                                                                                           LeuThrAlaAlaHisCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTTTTATCTCCAGTTCTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTTTCTATTCAGAG-----AGGGAGGCTAATAGGTCTCGAGAT-----CTTGGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----GAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuLysGlyHisGluThr-----CysMetGlyAlaVal----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAAGAAGTTGGCATG 873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cys-----GlyMetValTrpGluHisLysLysGly 484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -GAAAACAGACAAGGGTAC---AGGACAGCCAGCGTCATCATTGCT 441
                                                                                                                                                                                                    AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----LysSerLeuSerLeu 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                        --ValSerGluTyrPheVal
                                                                                                                                                                                                    THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              501
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ) LUCATION: (1)...(22) US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-601-368-6 (1-1141)
                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                          RESULT 14
US-10-601-368-4
                                                                                                                                                                                         밁
                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
Sequence 4, Application US/10601368

Publication No. US20050260702A1

GENERAL INFORMATION:

APPLICANT: Pan, Yang

APPLICANT: Lora, Jose M.

TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT

FILE REFERENCE: 07334-275001

CURRENT APPLICATION NUMBER: US/10/601,368

CURRENT FILING DATE: 2003-06-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: SIGNAL
LOCATION: (1)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                    562
                                                                                                                                                                                                                                                                                                                                                                                                             469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  237
                                                                                                                                                                                         352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CysGlnThrTyrMetAspIleVallleValLeuAspGlySerAsnSerIle---TyrPro
                                                                                                                                                                                        |||:::|||
LeuGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlyGlyArgLy8GlyAlaLy8-----Ly8ValMetIleValIleThrAspGlyGluSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AsnAspTyrArgSerValLysAspValValGluAlaAlaSerHisIleGluGlnArgGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---
                                                                                                                                                                                                                      CIGCAAGGC
                                                                                                                                                                                                                                                     GluAlaAlaLeu-
                                                                                                                                                                                                                                                                                                                                                GGTGCAATTGTTTACTGTGTTGGTGTGAAAGAT-----TTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                         HisAspSerProAspLeuGluLysValIleGlnGlnSerGluArgAspAsnValThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlyThrGluThrArgThrAlaPheGlyIleGluPheAlaArgSerGluAlaPheGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACACTTACATGCATGAAGGATTTGAA-----AGGGCCAGTGAGCAGATTTATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnIleGlnValGlyValValGlnTyrGlyGluAspValValHisGluPheHisLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCAC
                                                                                                                                                                                                                                                                                    CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                 AsnGluIleLysTyrIleAlaSerAspProAspAspLysHisPhePheAsnValThrAsp
                                                                                                                                                                                                                                                                                                                                                                             TyrAlaValAlaValLeuGlyTyrTyrAsnArgArgGlyIleAsnProGluThrPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.00996
107.00
37.93%
24.14%
5.34%
                                                                                                                                                                                         354
                                                                                                                                                                                                                      630
                                                                                                                                                                                                                                                                                                                                                                                                           ----crcttttctattcagagagggaggctaataggtctcgagatctt
                                                                                                                                                                                                                                                     LysAspIleValAspAlaLeuGlyAspArgIlePheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative: Mismatches: Indels: Gaps:
                                                AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1141
49
28
88
38
9
                                                  USES
                                                                                                                                                                                                                                                                                                                   334
                                                                                                                                                                                                                                                                                                                                                 561
                                                                                                                                                                                                                                                                                                                                                                              314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          286
                                                                                                                                                                                                                                                                                    621
                                                                                                                                                                                                                                                                                                                                                                                                           513
                                                                                                                                                                                                                                                                                                                                                                                                                                          294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; LENGTH: 1166
; TYPE: PRT
; ORGANISM: Homo :
US-10-601-368-4
   US-10-601-368-3
Sequence 3, Application US/1060
Publication No. US20050260702A1
GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                        밁
                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-601-368-4 (1-1166)
                                                                                                                               밁
                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score:
                                                                                               RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 199-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.950 ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Мо.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    289
                                                                                                                            330 LeuGluGly
                                                                                                                                                       622 CTGCAAGGC 630
                                                                                                                                                                                           313 GluAlaAlaLeu---
                                                                                                                                                                                                                                                                                                                                                                                253
                                                                                                                                                                                                                                                                                                                                                                                                               CATGAAGAT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlyThrGluThrArgThrAlaPheGlyIleGluPheAlaArgSerGluAlaPheGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACACTTACATGCATGAAGGATTTGAA-----AGGGCCAGTGAGCAGATTTATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AsnAspTyrArgSerValLysAspValValGluAlaAlaSerHisIleGluGlnArgGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GinIleGlnValGlyValValGlnTyrGlyGluAspValValHisGluPheHisLeu---
                                                                                                                                                                                                                                                                                                                                                                                HisAspSerProAspLeuGluLysVallleGlnGlnSerGluArgAspAsnValThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TrpValGluValGlnHisPheLeuIleAsnIleLeuLysLysPheTyrIleGlyProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CysGlnThrTyrMetAspIleValIleValLeuAspGlySerAsnSerIle---TyrPro
                                                                                                                                                                                                                     CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                     AsnGluIleLysTyrIleAlaSerAspProAspAspLysHisPhePheAsnValThrAsp
                                                                                                                                                                                                                                                                                    GGTGCAATTGTTTACTGTGTTGGTGTGAAAGAT-----TTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                   TyrAlaValAlaValLeuGlyTyrTyrAsnArgArgGlyIleAsnProGluThrPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCTACGCCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.01
107.00
37.93%
24.14%
5.34%
                                                                                                                               332
                                                                  /10601368
                                                                                                                                                                                                                                                                                                                                                 - CTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTT
                                                                                                                                                                                             LysAspIleValAspAlaLeuGlyAspArgIlePheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1166
49
28
88
38
                                                                                                                                                                                                                                                                                                                                                                                                                1 1 1 1 1 1 1
```

513 292 561 312 272

468

459 252 214 399 234 175 288 194 348 174

```
FILE REFERENCE: 07334-275001

CURRENT APPLICATION NUMBER: US/10/601,368

CURRENT FILING DATE: 2003-06-23

PRIOR APPLICATION NUMBER: US/09/561,263A

PRIOR FILING DATE: 2000-04-27

PRIOR APPLICATION NUMBER: US 09/322,790

PRIOR FILING DATE: 1999-05-28

NUMBER OF SEQ ID NOS: 40

SOFTWARE: PASCSEQ for Windows Version 3.0

SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; NAME/KEY: SIGNAL ; LOCATION: (1)...(22) US-10-601-368-3
                                                                                                                유성
                                                                                                                                                                               묽
                                                                                                                                                                                                       S
                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-1_COPY_104_1207 (1-1104) x US-10-601-368-3 (1-1188)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores: Pred. No.:
                         र्
                                                           밁
                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 1188
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                              460
                                                                                                                       315
                                                                                                                                                                                                                 469
                                                                                                                                                                                                                                               275
                                                                                                                                                                                                                                                                                                           257
                                                                                                                                                                                                                                                                                                                                         400
                                                                                                                                                                                                                                                                                                                                                                        237
                                                                                                                                                                                                                                                                                                                                                                                                       349
                                                                                                                                                                                                                                                                                                                                                                                                                                    217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      115 TGCTACGGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCAC
                              622
                                                           335
                                                                                          562
                                                                                                                                                    514
                                                                                                                                                                                  295
                                                                                                                   ABNGlulleLyBTyrileAlaSerAspProAspAspLysHisPhePheAsnValThrAsp 334
                                                                                                                                                                                                                                                                                                         GlyGlyArgLysGlyAlaLys-----LysValMetileValIleThrAspGlyGluSer 274
                                                                                                                                                                                                                                                                                                                                      GAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTC 459
                                                                                                                                                                                                                                                                                                                                                                     GlyThrGluThrArgThrAlaPheGlyIleGluPheAlaArgSerGluAlaPheGlnLys 256
                                                           GluAlaAlaLeu--
                                                                                                                                                                                 CATGAAGAT-----
                                                                                                                                                                                                                                                                                                                                                                                                       GACACTTACATGCATGAAGGATTTGAA-----AGGGCCAGTGAGCAGATTTATTAT 399
                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnAspTyrArgSerValLysAspValValGluAlaAlaSerHisIleGluGlnArgGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGACAGAGAACAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGA 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GinIleGlnValGlyValValGlnTyrGlyGluAspValValHisGluPheHisLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TrpValGluValGlnHisPheLeuIleAsnIleLeuLysLysPheTyrIleGlyProGly 197
                                                                                        CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCT 621
                                                                                                                                                    GGTGCAATTGTTTACTGTGTGTGTGAAAAGAT-----TTCAATGAGACACAG 561
                                                                                                                                                                                                                                              HisAspSerProAspLeuGluLysValIleGlnGlnSerGluArgAspAsnValThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACA 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGAATGAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTC---ATCAGCCCA---
LeuGluGly 354
                            CTGCAAGGC 630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.0101
107.00
37.93%
24.14%
5.34%
                                                                                                                                                                                                                 ---CTCTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTT 513
                                                         -LysAspIleValAspAlaLeuGlyAspArgIlePheSer 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1188
49 ·
28
88
38
                                                                                                                                                                                                                                               294
                                                                                                                                                                                                                                                                                468
                                                                                                                                                                                                                                                                                                                                                                                                                                     236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             228
```

밁

352

Search completed: December 14, 2005, 12:55:40 Job time: 20.6998 secs



Run ջ

8

2, Appli 2, Appli 2, Appli 55, Appli 29, Appli 29, Appli 55, Appli 55, Appli 55, Appli 57, Appli 59, Appli 59, Appli 59, Appli 59, Appli 59, Appli 59, Appli 59, Appli 59, Appli 59, Appli 59, Appli 59, Appli 59, Appli

```
Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                     Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   number of
                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                         B B
  159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
                                                                                                                                                                                                                                                   Score
                                                                                                                                                                                                                                                                                                                                                                                                                                         Beq
Pəa
                                                                                       protein search,
                                                                                                                                                                                                                                                                                                                                                                                                                                        length:
length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BLOSUM62
Gapop 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hits satisfying
                                                                                                                                                                                                                                                    Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   572060 seqs, 82675679 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2
1914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   December 14, 2005, 11:02:37;
                                                                                                                                                                                                                                                                                                                              Issued Patente Aa:*

| Cgn2_6/ptodata/1/iaa/5_COMB.pep:*
| Cgn2_6/ptodata/1/iaa/6_COMB.pep:*
| Cgn2_6/ptodata/1/iaa/H_COMB.pep:*
| Cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
| Cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
| Cgn2_6/ptodata/1/iaa/backfiles1.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MATAERRALGIGFQWLSLAT.....VIIKEVPPPPAEESEENKIK 368
   Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10.0,
                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                         2000000000
  GenCore version (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    using
                                                                                                                                                                                                                                                    멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapext
US-10-104-047-2639
US-08-286-889-46
US-08-362-652-46
US-08-362-652-46
US-08-362-253A-46
US-08-943-263-46
US-08-943-263-46
US-08-943-263-46
US-09-193-043-65
US-09-193-043-63
US-08-485-618-53
US-08-485-672-53
US-08-943-363-53
US-09-688-307A-53
US-09-688-307A-53
US-08-485-618-37
US-08-485-618-37
US-08-365-672-37
US-08-365-672-37
US-08-485-618-37
US-08-363-672-37
US-08-485-673-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-09-193-043-37
US-08-943-363-37
US-08-943-363-37
US-09-948-307A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   chosen parameters:
                                                                                                                                                                                                                                                    H
                                                                                                                                                                                                                                                                                                                                                                                                       summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mode1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (without alignments)
916.781 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search time 33.1864 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ltd
                                                                                                                                                                                                                                                    Description
          Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                  Sequence
  ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-104-047-2639
                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1
US-10-104-047-2639
                            밁
                                          δ
                                                               片
                                                                           δ
                                                                                                 멍
                                                                                                                 δ
                                                                                                                                    밁
                                                                                                                                                  5
                                                                                                                                                                      밁
                                                                                                                                                                                      Ś
                                                                                                                                                                                                        밁
                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2639, Application US/10104047 Patent No. 6943241 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 4096
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2639
                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/104,047 CURRENT FILING DATE: 2002-03-25 PRIOR APPLICATION NUMBER: PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: HELIX RESEARCH INSTITUTE TITLE OF INVENTION: No. 6943241el full length cDNA FILE REFERENCE: H1-A0105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                             301
                                                                                                  181
                                                                                                                   183
                                                                                                                                     123
                                              303
                                                               241
                                                                                 243
                                                                                                                                                      123
                                                                                                                                                                                                                                            190;
                                                                                                                                                                       63
                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                         488
  -EESEE
                                                              FNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVR
                                                                                                                                     GLKLANEQI--QKAGGLKTSSIIALTDGKLDGLVPSYAEKEAKISRSLGASVYCVGVLD
                                                                                                                                                   GFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKD
                                                                                                                                                                      YYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKYLPGGDTYMHE
| ||:|| :|:||:||:||:||:||
YNFVQQLAERFVSPEMRLSFIVFSSQATIILPLTGDRGKISKGLEDLKRVSPVGETYIHE
                                                                                                                                                                                                                    AERRALGIGFQWLSLATLVLICAGQGG-RREDGGPACYGGFDLYFILDKSGSVLHHWNEI
                             KSVISGSLIVTATECSNGIAAIIVILVLLLLLGIGLMWWFWPLCCKVVIKDPPPPPAPAP
                                             LSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPA---
                                                                                                                                                                                                         AERSPARSPGSWLFPGLWLLVLSGPGGLLRAQEQPSCRRAFDLYFVLDKSGSVANNWIEI
                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              50.3%;
51.9%;
                                                                                                                                                                                                                                           s; Score 962.5; DB 2pred. No. 1.1e-97;63; Mismatches 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-173-497-2
US-08-286-689-2
US-08-485-618-2
US-08-485-618-9
US-08-362-652-5
US-08-362-652-5
US-08-605-672-2
US-08-605-672-2
US-08-605-672-9
US-08-482-293A-2
US-08-482-293A-2
US-08-482-293A-2
US-08-482-293A-2
US-08-483-363-5
US-08-943-363-5
US-08-943-363-5
US-08-943-363-5
US-09-193-043-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ALIGNMENTS
                                                                                                                                                                                                                                             106;
                                                                                                                                                                                                                                                              2;
                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                488;
```

Gaps

122

62

182 122

180

302 240 242

359

Result

밁

361

KEEEEE

366

```
WS-08-485-618-46
US-08-485-618-46
Sequence 46, Application US/08485618
; Patent No. 5728533
                                                                                                                                                                                       밁
                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-286-889-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-286-889-46
                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Gallatin, W. mich
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5470953el
NUMBER OF SEQUENCES: 51
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: P38,659 REGISTRATION TO NUMBER: 2786.
TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300 TELEPAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/173,497
FILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: #1114smg IT ITGENTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
                                                                                                                       316
                                                                                                                                                        200
                                                                                                                                                                                         259
                                                                                                                                                                                                                          149
                                                                                                                                                                                                                                                               204
                                                                                                                                                                                                                                                                                                                                   144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46,
                                                                                                                                                                                                                                                                                                  95
                                                                                                                                                                                                                                                                                                                                                                    37
                                                                                                                                                                                                                                                                                                                                                                                                         66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6, Application US/08286889 5470953
                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chicago
                                                                                                                                                      PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD
                                                                                                                                                                                                                                                               FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                     PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                                                      PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 94
                                                                                                                                                                                                                        TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF
                                                                                                                       KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                           TDGOKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E: Marshall, O'Toole, G
233 South Wacker Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              United States
                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                     8.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     46:
                                                                                                                                                                                                                                                                                                                                                                                                     42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27866/32168
                                                                                                                                                                                                                                                                                                                                                                                                       Score 166; DB 1; ]
Pred. No. 1.1e-08;
2; Mismatches 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gerstein, Murray &
e, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1155;
                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                         30;
                                                                                                                       364
                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                               258
                                                                                                                                                                                           315
                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                  148
                                                                                                                                                                                                                                                                                                                                     203
```

US-08-362-652-46

Sequence 46, Application US/08362652
Patent No. 5766850
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monice

Van der Vieren, Monica

```
Ş
                                                                          밁
                                                                                                            á
                                                                                                                                                   밁
                                                                                                                                                                                     Ś
                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                  US-08-485-618-46
                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1155 Ami-
                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PILING DATE:
CLASSIFICATION: 435
CLASSIFICATION DATA:
PRIOR APPLICATION UNMBER: US 08/173,497
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/286,889
PRIOR APPLICATION STATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: NO. NUMBER OF SEQUENCES: 10 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: NO. 5728533el NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                     Match 8.7%;
Local Similarity 28.2%;
les 66; Conservative 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
 316
                                     200
                                                                            259
                                                                                                                149
                                                                                                                                                     204
                                                                                                                                                                                                                              144
                                                                                                                                                                                         95
                                                                                                                                                                                                                                                                    37
KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD
                                     PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD
                                                                                                                                                                                         LTEDR----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                            PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                    PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 94
                                                                        TDGQKFRDFLEYRHVIPEAEKA---GIIRYAIGVGDAFREFTALQELNTIGSAFSQDHVF
                                                                                                              TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 199
                                                                                                                                                   FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                  protein
                                                                                                                                                                                                                                                                                                       42; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27866/32797
                                                                                                                                                                                                                                                                                                   Score 166; DB 1; Pred. No. 1.1e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                           Length 1155;
                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Subunit
                                                                                                                                                                                                                                                                                                         30;
                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                         148
                                                                                                                                                       258
                                                                              315
                                                                                                                                                                                                                                203
```

```
Ś
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; MOLECULE TYPE: protein US-08-362-652-46
                                                                                                                                                                                 RESULT 5
US-08-605-672-46
                                                                                                                                                                                                                                                       믕
                                                     Sequence 46, Application US/08605672
Patent No. 5817515
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5817515el Human
NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 46:
SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: No. 5/bbosses: NUMBER OF SEQUENCES: 93
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 08/286,889 FILING DATE: 5-AUG-1994 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 01
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 20-
CTTY: Chicago
Tllino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin palantaments.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: United States
                                                                                                                                                                                                                                                       316
                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                            259
                                                                                                                                                                                                                                                                                                                                                               149
                                                                                                                                                                                                                                                                                                                                                                                                204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          37
                                                                                                                                                                                                                                                                                                                                                                                                                                    95 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60606-6402
                                                                                                                                                                                                                                                                                       PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD
                                                                                                                                                                                                                                                                                                                                                                                                FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 94
                                                                                                                                                                                                                                                                                                                                                               TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 199
                                                                                                                                                                                                                                                      KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-3856
                                                                                                                                                                                                                                                                                                                            TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8.7%; Score 166; DB 1; Length 1155; 28.2%; Pred. No. 1.1e-08; ative 42; Mismatches 96; Indels 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5766850el Human 2 Integrin Alpha Subunit
                                                                          2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #1.25
                                                                             Subunit
                                                                                                                                                                                                                                                                                           253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                315
                                                                                                                                                                                                                      RESULT 6
US-08-482-293A-46
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                   259
                                                                                                                                                                                                                                                                                                                                                                                                      149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    66;
```

```
MOLECULE TYPE: protein US-08-605-672-46
                                                                                                                                                                                                           Sequence 46, Application US/08482293A Patent No. 5831029
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
PILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
STREET: STREET: Chicago
                                                                              NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                 APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5831029el Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: 312-4. 1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                          316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                      200 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    37 PACYG-GEPLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Illinois
                                                              233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8.7%; Score 166; DB 1;
28.2%; Pred. No. 1.1e-08;
ative 42; Mismatches 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
                                                                                                                                                      2 Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1155;
                                                                                                                                                      Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
```

```
RESULT 7
US-08-943-363-46
                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-482-293A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PER CONTROL NUMBER: US 08/286,889
PILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/362,652
PILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/3268
TELEPHONE: 312-474-6300
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                  Sequence 46, Application US/08943363
Patent No. 5837478
                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                           APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5837478el NUMBER OF SEQUENCES: 114
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 530
    COUNTRY:
ZIP: 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
                                      CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                               STREET:
                                                                                             DDRESSEE:
                                                                                                                                                                                                                                                                                                                                                          316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                 200
                                                                                                                                                                                                                                                                                                                                                                                                                                       259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIJAL 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       h 8.7%; Score 166; DB 1; Length 1155;
Similarity 28.2%; Pred. No. 1.1e-08;
66; Conservative 42; Mismatches 96; Indels 3
RY: United States 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60606-6402
                                                                                                                                                                                                                                                                                                                                                                                               PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 199
                                                                                                                                                                                                                                                                                                                                                                                                                                       TDGQKFRDPLEYRHVIPEAEKA----GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK
                                                                               233 South Wacker Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1155 amino acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             United States
                                                                           Marshall, O'Toole, Gerstein, Murray & Borun
33 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         46:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27866/32684
                                                                                                                                                          Human
                                                                                                                                                        2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30;
                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94
                                                                                                                                                                                                                                                                                                                                                                                                                                         315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12;
```

Sequence 46, Application US/09193043
PAtcent No. 6251395
GENERAL INFORMATION:
APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 6251395el Human 2
FILE REFERENCE: 27866/35004
CURRENT APPLICATION NUMBER: US/09/193,043
CURRENT FILING DATE: 1998-11-16
EARLIER APPLICATION UNMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1993-10-23
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-12-21
EARLIER REPLICATION NUMBER: 08/362,652
EARLIER REPLICATION NUMBER: 08/362,652

08/943,363

RESULT 8 US-09-193-043-46

258

```
á
                                                                                  밁
                                                                                                                     8
                                                                                                                                                                 밁
                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-943-363-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amin-
                                                                                                                                                                                                                                                                                                                                   Query Match 8.7%; Score 166; DB 1; Best Local Similarity 28.2%; Pred. No. 1.1e-08; Matches 66; Conservative 42; Mismatches 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 312-474-63
TELEFAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Williams Jr., Joseph REGISTRATION NUMBER: 38,659 REFERENCE/DOCKET NUMBER: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
316
                                       200 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD
                                                                                     259
                                                                                                                          149
                                                                                                                                                                   204
                                                                                                                                                                                                                                                    144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                             37
                                                                                                                                                                                                           95 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 amino acid
KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD
                                                                                                                          TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 199
                                                                                                                                                                 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                           PACYG-GFDLYFILDKSGSV-LHHWNBIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 94
                                                                                  TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  46:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27866/32684
                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 1155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #1.25
                                                                                                                                                                                                                                                                                                                                       96;
                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                       30;
  364
                                                                                                                                                                                                                                                                                                                                       Gaps
```

EARLIER FILING DATE: 1997-10-03 NUMBER OF SEQ ID NOS: 114

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: PRT ; ORGANISM: Mus musculus US-09-193-043-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Van der Vieren, Monica
TITILE OF INVENTION: No. 6432404el Human Beta-
FILE REPERENCE: 27866/36646
CUURENT APPLICATION NUMBER: US/09/688,307A
CURRENT FILING DATE: 2000-10-13
PRIOR APPLICATION NUMBER: 09/193,043
PRIOR FILING DATE: 1998-11-16
PRIOR PRIOR DATE: 1998-11-16
PRIOR FILING DATE: 1996-02-22
PRIOR FILING DATE: 1996-02-22
PRIOR FILING DATE: 1993-12-23
PRIOR FILING DATE: 1993-12-23
PRIOR PRIOR APPLICATION NUMBER: 08/286,889
PRIOR PRIOR PRIOR DATE: 1994-08-05
PRIOR FILING DATE: 1994-08-05
PRIOR FILING DATE: 1994-08-05
PRIOR FILING DATE: 1994-12-21
PRIOR FILING DATE: 1994-12-21
PRIOR FILING DATE: 1994-12-21
PRIOR FILING DATE: 1994-12-21
PRIOR FILING DATE: 1994-12-21
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR FILING DATE: 1994-12-21
PRIOR FILING DATE: 1994-12-21
PRIOR FILING DATE: 1997-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ई
                                    ঠ
                                                                                    밁
                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 9
US-09-688-307A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
밁
                                                                                                                                                                              Query Match
Best Local S
Matches 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver.
SEQ ID NO 46
LENGTH: 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 46, Application US/09688307A Patent No. 6432404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 46
                                                                                                                                                                                                                                                                             -09-688-307A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Gallatin, Michael W. APPLICANT: Van der Vieren Mon
                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 114
SOFTWARE: PatentIn Ver. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1997-10-03
                                                                                                                                                                                                                                                                                                LENGTH: 1155
TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                                              / Match 8.7%; Score 166; DB 2; Length 1155;
Local Similarity 28.2%; Pred. No. 1.1e-08;
nes 66; Conservative 42; Mismatches 96; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      204
204
                                                                                       144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              37 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 94
                                         95
                                                                                                                                     37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 199
FTEFKSSLSPQSLVDAIVQLQ-
                                      LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 148
                                                                                       PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                   PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8.7%;
                                                                                                                                                                                                                                                                                                                                                                                               ر
ا
ا
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Score 166; DB 2; Length 1155; 
; Pred. No. 1.1e-08; 
42; Mismatches 96; Indels 3
GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Beta-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30;
                                                                                                                                                                                   30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        364
                                                                                                                                                                                   Gaps
                                                                                            203
                                                                                                                                       94
                                                                                                                                                                                   12
```

```
CURRENT APPLICATION NUMBER: US/09/350,259
CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/193,043
EARLIER APPLICATION NUMBER: 09/193,043
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/363,363
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER PILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 10
US-09-350-259-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-350-259-46
                                                                                                                                                                                                                                                                                                                                                 US-08-485-618-53
                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 46, App
Patent No. 66209
                                                                                                                                                                                                                                                             Sequence 53, Application US/08485618 Patent No. 5728533
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 8.7%; Score 166; DB 2; Length 11 Best Local Similarity 28.2%; Pred. No. 1.1e-08; Matches 66; Conservative 42; Mismatches 96; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Gallatin, Michael W. APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: NO. 6620915el Human 2 FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 1155
STREET: Chicago
CITY: Chicago
TYPR: Illinois
                                                                                                                                                                               APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: NO. 5728533el
                                                                                                                             NUMBER OF SEQUENCES: 1
                                                                              ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                           316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   37 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TDGQKFRDPLEYRHVIPEAEKA----GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TDGOKFRDPLEYRHVIPEAEKA----GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/09350259
                                                                                                                                                                                          Human
                                                                                                                                                                                          2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30;
                                                                                                                                                                                          Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12
```

```
S
                                                                                                                                                                                                                                                                         RESULT 12
US-08-362-652-53
                                                                                                                                                                                                                                                                                                                                                                                           ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-485-618-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 66
                                                                                                                                                                                                            Sequence 53, Applicat Patent No. 5766850 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/286,889
PILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
ADPLICATION NUMBER: US 08/362,652
                                                                                                                                             APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
APPLICANT: Van der Vieren, Monica
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                 TITLE OF INVENTION: NO. NUMBER OF SEQUENCES: 93 CORRESPONDENCE ADDRESS: ADDRESS: Marshall, (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READA
MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: 312-1.
TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.
                                      STREET: 233 Sout
CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                        316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                               200
                                                                                                                                                                                                                                                                                                                                                                                                                                     259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          149 TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 Similarity
66; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60606-6402
RY: United States 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                                                                             PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVVRGNGFRHARNVD 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LTEDR-----EQIRQGLEBLQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                     TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PACYG-GFDLYFILDKSGSV-LHHWNEIYYFYEQLAHKFISPQLRMSFIVFSTRGTTLMK
                                                                                                                                                                                                                                                           Application US/08362652
                                                                             E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8.7%; Score 166; DB 1; Length 1161; larity 28.2%; Pred. No. 1.1e-08; Conservative 42; Mismatches 96; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27866/32797
                                                                                                                                                          2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            199
```

```
US-08-605-672-53; Sequence 53, A; Patent No. 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-362-652-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 1161 amino aci
                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
ZIP: 60606-6402

COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                    APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5817515el Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/362,652
                                                                                                                                                                                                       NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
                                                                                                                                STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 0 FILING DATE: 23-DEC-1993
                                                                                                         COUNTRY:
                                                                                                                                                   STREET: 233 S
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE:
                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                316 KVGN-FVALRSIOROIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        144
                                                                                                                                                                                                                                                                                                                                                                                                                                                       200 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         37 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PECPGQEMDIAPLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-3856
                                                                                                                                Illinois
                                                                                                                                                                                                                                                                                                                                      Application US/08605672
                                                                                                                                                                   E: Marshall, O'Toole, G
233 South Wacker Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    312-474-0448
                                                                                                               United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8.7%;
                                                                                                                                                                                                                            103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  53:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 166; DB 1; L
Pred. No. 1.1e-08;
""matches 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27866/32391
                                                                                                                                                                      Gerstein, Murray & Borun
e, 6300 Sear Tower
   Version
                                                                                                                                                                                                                                             2 Integrin Alpha Subunit
   #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
```

148

12

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
US-08-482-293A-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       १
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; MOLECULE TYPE: protein US-08-605-672-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                믕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
PRIOR APPLICATION UNMBER: US 08/362,652
APPLICATION UNMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REGISTRATION NUMBER: 27866/3268
                                                                                                                                                                                                                                                                                                                                Patent No. 5831029
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 23-DEC-1993
                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FOR PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
                 SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                        APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5831029el Human
                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              y Match 8.7%;
Local Similarity 28.2%;
hes 66; Conservative 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 1161 amir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                STREET: 233 Strings
                                                                                                                                           COUNTRY:
 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                     53, Application US/08482293A
). 5831029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         37 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 148
                                                                                                                            60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                              KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TDGOKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                 Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    312-474-0448
                                                                                                                                             United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                           103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/605,672
US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    53:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 166; DB 1; Length 1161; Pred. No. 1.1e-08; 2; Mismatches 96; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27866/32684
                                                                                                                                                                                                                                                                            2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX:
                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               259
```

```
US-08-943-363-53
Sequence 53 Application US/08943363
Patent No. 5837478
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-482-293A-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 8.7%; Score 166; DB 1; L Best Local Similarity 28.2%; Pred. No. 1.1e-08; Matches 66; Conservative 42; Mismatches 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 278
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 0 FILING DATE: 23-DEC-1993 PRIOR APPLICATION DATA:
                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FOR COMPOS SOFTWARE: PATENTIN Release #1.0.
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                   ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun ADDRESSEE: Marshall, O'Toole, G300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                 STREET: 200
STREET: 200
STREET: 200
STREET: 200
STREET: 200
TIlinoi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                      APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 200 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIJAL 148
                                                                                                                                                                                             60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 199
                                                                                                                                                                                                                                 Illinois
                                                                                                                                                                                                               United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            312-474-6300
  530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US 08/362,652
                                                                                   Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US 08/286,889
                                        US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27866/32684
                                                                                                                                                                                                                                                                                                                                                                    Human
                                                                                     Version #1.25
                                                                                                                                                                                                                                                                                                                                                                    2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             364
```

```
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 27866/32684
FILECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPAX: 312-474-6300
TELEPAX: 312-474-6300
TELEPAX: 312-474-6300
TELEPAX: 1161 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-943-363-53

B.7%; Score 166;
Search completed: December 14, 2005, 11:21:04 Job time : 34.1864 secs
                                                                                                                                                 문
                                                                                                                                                                                        중 음 중
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                 밁
                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                Query Match 8.7%; Score 166; DB 1; Length 1161; Best Local Similarity 28.2%; Pred. No. 1.1e-08; Matches 66; Conservative 42; Mismatches 96; Indels 30; Gaps
                                                                              316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                     200 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 253
                                                                                                                                                         259 TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                      149 TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 199
                                                                                                                                                                                                                                                                                                                     204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                95 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                           315
                                                                                                                                                                                                                                                                                  148
```

Run

9

Sequence: Title: Perfect score:

Scoring table:

226,0

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query
Match Length
   Published Applications AA Main:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2
1914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       December 14, 2005, 11:18:07; Search time 110.867 Seconds (without alignments) 1386.897 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1867569 seqs, 417829326 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MATAERRALGIGFQWLSLAT.....VIIKEVPPPPAEESEENKIK 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen
     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                        US-11-047-278-2
US-09-918-715-18
US-09-918-715-23
US-10-301-822-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
Sequence 2, Appli
Sequence 187, App
Sequence 189, App
Sequence 199, App
Sequence 187, App
Sequence 187, App
Sequence 232, App
Sequence 232, App
Sequence 232, App
Sequence 6, Appli
Sequence 6, Appli
Sequence 621, App
Sequence 194, App
Sequence 194, App
Sequence 194, App
Sequence 194, App
Sequence 194, App
Sequence 194, App
Sequence 194, App
Sequence 114, App
Sequence 118, Appli
Sequence 118, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
ITITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296, 97745
CUURRENT APPLICATION NUMBER: US/11/047,278
CUURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: 00/251,481
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICATION UMBER: US/09/970,076
PRIOR APPLICA
                                                                                                                                                                                         δ
                               밁
                                                            S
                                                                                               밁
                                                                                                                        S
                                                                                                                                                       닭
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                        US-11-047-278-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1
US-11-047-278-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2, Application US/11047278 Publication No. US20050196407A1
                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLMWFWPLCCTVIIKEVPPPPAE
                                                                                                                                181
                                                                                                                                                            368;
                                                                                                                                                                                                                            61 EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                                                                                                                                              61 BIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                                                                                                                                                                                           μ
                                                                                                                                                                                                                                                                                                             1 MATAERRALGIGFOMLSLATLVLICAGOGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                         h 100.0%; Score 1914; DB 6; Similarity 100.0%; Pred. No. 4.4e-184;
                                                     VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                  KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                 KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                             MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                   VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-201-292-20
US-10-38-307-26
US-10-038-307-22
US-10-201-292-26
US-10-201-292-27
US-10-201-292-16
US-10-201-292-16
US-10-201-292-16
US-10-201-292-16
US-10-201-292-16
US-10-201-292-16
US-10-201-292-17
US-10-201-292-32
US-10-201-292-32
US-10-201-292-32
US-10-201-292-32
US-10-201-292-38
                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
```

0

Gaps

300 240

300

180

240 180 120

60 60

120

Result No.

Score

```
PRIOR PPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOFTWARE: FBSESEQ for Windows Version 3.
SEQ ID NO 187
LENGTH: 564
RESULT 3
US-09-918-715-232
(Sequence 232, Application US/09918715
; Publication No. US20030017157A1
; GENERAL INFORMATION:
; APPLICANT: Brad St. Croix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-918-715-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 2
US-09-918-715-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                      밁
                                                                                                                                                                                               δ
                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                  ર્
                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 99.0%; Score 1894; DB 3; Best Local Similarity 100.0%; Pred. No. 8.7e-182; Matches 364; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 187, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE ON THE TONE ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/09/918,715
CURRENT FILING DATE: 2001-08-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelste
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                            361
                                                                                                                                                                      301
                                                                                                                                                                                                  301
                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                          HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV 180
                                                                                                                                                                                                                                                                                                                                                                                                                   EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ESEENKIK 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLMWEWPLCCTVIIKEVPPPPAE
                                                                                                                                                                                                                                                   VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                       KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                          MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ESEENKIK 368
                                                                                                                                            ESEE 364
                                                                                                                                                                         DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                                                                                                                                                                              VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                     KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                                     EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/09918715
o. US20030017157A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   o
••
                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                         360
                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                         RESULT 4
US-10-301-822-199
                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                             ESEE
                                                                                                                                                                                                                                                                                                                   ESEE
```

```
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
ITITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAI
ITILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/09/918,715
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
INUMBER OF SEQ ID NOS: 358
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 232
LENGTH: 564
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Schlegel, Robert
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, ANI
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPMO1-029P2RNM
CURRENT APPLICATION NUMBER: US/10/301,822
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-918-715-232
                                                                                                                                                                                                                                                                                                                                                                                Sequence 199, Application US/10301822 Publication No. US20030148410A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 364; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIYYCVGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIBILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MATAERRALGIGFOWLSLATLVLICAGOGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99.0%; Score 1894; DB 3; 1
100.0%; Pred. No. 8.7e-182;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PATTERNS
                                                                                                                                     ASSESSMENT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                        PREVENTION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                        AND
```

¢

Mon

```
APPLICANT: Fahy, Eoin D.
APPLICANT: Fahy, Eoin D.
APPLICANT: Zhang, Bing
APPLICANT: Zhang, Bing
APPLICANT: Taylor, Steven W.
APPLICANT: Taylor, Steven W.
APPLICANT: Marnock, Dale E.
APPLICANT: Warnock, Dale E.
TITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME
FILE REFERENCE: 660088,465
CURRENT APPLICATION NUMBER: US/10/408,765A
CURRENT APPLICATION NUMBER: US/10/408,765A
CURRENT APPLICATION NUMBER: US/10/408,765A
CURRENT APPLICATION NUMBER: US/10/408,765A
CURRENT FILING DATE: 2003-04-04
NUMBER OF SEQ ID NOS: 3077
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-03-05
PRIOR PILING DATE: 2002-05-20
PRIOR FILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
SOFTWARE: FRSUSEQ for Windows Version 4.0
SEQ ID NO 199
LENGTH: 564
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 5
US-10-408-765A-1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                     TYPE: PRT
ORGANISM: Homo sapiens
US-10-408-765A-1823
                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1823, Application US/10408765A Publication No. US20040101874A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo Sapiens -10-301-822-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    y Match 99.0%; Score 1894; DB 4; Cocal Similarity 100.0%; Pred. No. 8.7e-182; hes 364; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDXSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ESEE 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ESEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      364
99.0%;
Score 1894; DB 4;
Pred. No. 8.7e-182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 564;
                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
```

```
APPLICANT: Carson-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Vogelstein, Bert
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
SOFTWARE: FOSTSEQ for Windows Version 4.0
SEQ ID NO 187
LENGTH: 564
TYPE: PAT
CRGANISM: Homo sapiens
                           밁
                                                           á
                                                                                            밁
                                                                                                                     ঠ
                                                                                                                                                            뭉
                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 6
US-10-474-794-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                            Query Match 99.0%; Score 1894; DB 4; Best Local Similarity 100.0%; Pred. No. 8.7e-182; Matches 364; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 187, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
181
                                121
                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 HEGFERASEQIYYENROGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                 61
                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              364;
                                                                                                                                                              μ
KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                 HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV 180
                                                                                                                  EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM 120
                                                                                                                                                                MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                 MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ESEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ESEE 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSERBANRSRDLGAIVYCVGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
                                                                                             EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEBLQKVLPGGDTYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/10474794
o. US20040213793A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PATTERNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                               <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                               Gaps
                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                               0
```

```
Sequence 232, Application US/10474794

Publication No. US20040213793A1

GENERAL INFORMATION:

APPLICANT: St. Croix, Brad

APPLICANT: St. Croix, Brad

APPLICANT: Vogelstein, Bert

APPLICANT: Kinzler, Kenneth

TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT

FILE REFERENCE: 1107.00179

CURRENT APPLICATION NUMBER: US/10/474,794

CURRENT FILING DATE: 2003-10-14

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR FILING DATE: 2001-04-11

PRIOR APPLICATION NUMBER: 60/308,829

PRIOR FILING DATE: 2001-08-01

NUMBER OF SEQ ID NOS: 359

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 232

LENGTH: 564

TypE: PRT

ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 7
US-10-474-794-232
Conuence 232, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                 밁
                                        ঠ
                                                                  밁
                                                                                          á
                                                                                                                      밁
                                                                                                                                         ঠ
                                                                                                                                                                         밁
                                                                                                                                                                                                á
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Simi
Matches 364;
                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                 361
                                          361
                                                                  301
                                                                                                                     241
                                                                                                                                               241
                                                                                                                                                                         181
                                                                                                                                                                                                   181
                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ESEE
                                                                                                                                                                                                                                         HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
                                                                                                                                                                                                                                                                                           EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                           ESEE
                                                                                   DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                                                                                       VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                         KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                         KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                           HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DGLSFISSSVIITTTHCSDGSILAIALLLLELLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                 ESEE
                                                                    DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                                                                     VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ESEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                 364
                                           364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            364
                                                                                                                                                                                                                                                                                                                                                                                                 99.0%;
                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                 Score 1894; DB 4; Pred. No. 8.7e-182;
                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PATTERNS
                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                               564;
                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                     360
                                                                                            360
                                                                                                                      300
                                                                                                                                               300
                                                                                                                                                                         240
                                                                                                                                                                                                   240
                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                            멼
                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                     US-10-979-159-232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 8
US-10-979-159-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-979-159-187
Sequence 232, Application US/10979159
Publication No. US20050142138A1
GENERAL INFORMATION:
APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00114
CURRENT APPLICATION NUMBER: US/10/979,159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 364; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT ORGANISM: Homo sapiens
                                                                                                                                                                          361
                                                                                                                                                                                                   361
                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                           ESEE
                                                                                                                                                                                                   ESEE 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99.0%;
```

```
Sequence 187, Application US/10979159

Publication No. US20050142138A1

GENERAL INFORMATION:

APPLICANT: Brad St. Croix

APPLICANT: Bert Vogelstein

APPLICANT: Kenneth Kinzler

TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT

FILE REFERENCE: 1107.00134

CURRENT FILING DATE: 2004-11-03

PRIOR APPLICATION NUMBER: US/10/979,159

CURRENT FILING DATE: 2001-08-01

PRIOR APPLICATION NUMBER: 60/22,599

PRIOR APPLICATION NUMBER: 60/22,599

PRIOR FILING DATE: 2000-08-01

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR FILING DATE: 2000-08-11

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR FILING DATE: 2000-04-11

NUMBER OF SEQ ID NOS: 358

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 187

LENGTH: 564
                                                                                                                         HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLFGGDTYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                          KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                       DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
DGLSFISSSVIITTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                                                                                                                                                                                                KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1894; DB 5;
; Pred. No. 8.7e-182;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PATTERNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
```

240

180

```
Sequence 6, Application US/11047278
Publication No. US20050196407A1
GENERAL INFORMATION:
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/99/970,076
PRIOR APPLICATION NUMBER: 00/251,481
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR FILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR FILING DATE: 2001-10-03
PRIOR FILING DATE: 2001-10-03
PRIOR FILING DATE: 2001-10-03
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-05
PRIOR PRIOR DATE: 2001-10-05
PRIOR FILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR PRIOR PRIOR DATE: 2001-10-03
PRIOR FILING DATE: 2001-10-03
PRIOR FILING DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-03
PRIOR PRIOR DATE: 2001-10-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; SOFTWARE: FastSEQ for Windows Version
; SEQ ID NO 232
; LENGTH: 564
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-979-159-232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-11-047-278-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US/09/918,715
PRIOR FILING DATE: 2001-08-01
PRIOR PELICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-02
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR PELICATION NUMBER: 60/282,850
PRIOR PELICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 364; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ESEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VRGNGFRHARNVDRVLCSFKINDSVTLNEKFFSVEDTYLLCPAPILKEVGMKAALQVSMN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ESEE 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99.0%; Score 1894; DB 5; 1 ilarity 100.0%; Pred. No. 8.7e-182; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2004-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

```
PILE REFERENCE: PF546PCT

CURRENT FILING DATE: 2001-04-12

PRIOR APPLICATION NUMBER: 60/229, 358

PRIOR APPLICATION NUMBER: 60/229, 358

PRIOR FILING DATE: 2000-04-12

PRIOR FILING DATE: 2000-04-12

PRIOR APPLICATION NUMBER: 60/256, 931

PRIOR FILING DATE: 2000-12-21

PRIOR APPLICATION NUMBER: 60/199, 384

PRIOR APPLICATION NUMBER: 60/199, 384

PRIOR FILING DATE: 2000-04-25

NUMBER OF SEQ ID NOS: 2267

SOPTWARE: PATENTIN VET. 2.1

SEQ ID NO 621

LENGTH: 403
                                               밁
                                                                                   8
                                                                                                                        밁
                                                                                                                                                                                                                                                              ; TYPE: PRT ; ORGANISM: Homo sapiens US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-11-047-278-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 621, Application US/09833245
Publication No. US20040010134A1
GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Proteins
                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 363; Conserv
121 HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         364;
                                                    13
                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                        \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                        EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                        MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                            MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ESEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ESEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLLWWFWPLCCTVIIKEVPPPPAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MATAERRALGIGFQWLSLATIVLICAGQGGRREDGGDACYGGFDLYFILDKSGSVLHHWN
                                                      EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                         98.7%; Score 1889; DB 3; 100.0%; Pred. No. 1.7e-181; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99.0%; Score 1894; DB 6; 100.0%; Pred. No. 8.7e-182; tive 0; Mismatches 0;
                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                               403;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           564;
                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                     180
                                                        120
                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

```
US-09-833-245-620

(US-09-833-245-620

(US-09-833-245-620

(US-09-833-245-620

(US-09-833-245-620

(US-09-833-245-620

(US-09-833-245-620

(US-09-831-81-620

(US-09-831-81-620

(US-09-831-81-620

(US-09-831-81-620

(US-09-831-81-620

(US-09-831-81-620

(US-09-831-81-620

(US-09-831-81-620

(US-09-831-81-620

(US-09-81-620

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: SITE
LOCATION: (331)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (368)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-833-245-620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                       밁
                                                                                                      á
                                                                                                                                                                      밁
                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                              Matches 360;
                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: (175)
OTHER INFORMATION: X
NAME/KEY: SITE
LOCATION: (320)
OTHER INFORMATION: X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                          121
                                                                                                           121
  181
                                                                                                                                                                      61
                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                               بر
                                                                                                                                                                                                                                                                                                            1 MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DGLSFISSSVIITTTHCSDGSILAIALLLLFLLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VRGNGFRHARNVDRVLCSFKINDSVTLNEKÞFSVEDTYLLCÞAPILKEVGMKAALQVSMN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                   EIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ESE 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                       HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIXYCVGV
                                                                                                   HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV 180
                                                                                                                                                                   ETYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYM
                                                                                                                                                                                                                                                                                  MATAERRALGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Xaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xaa equals any of the naturally occurring L-amino
                                                                                                                                                                                                                                                                                                                                                                                                                     97.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          equale
                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                              Score 1870; DB 3;
Pred. No. 1.4e-179;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          any
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       naturally occurring
                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     403;
                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          L-amino
                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acids
                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
  240
                                                          180
                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                  60
```

```
Sequence 194, Application US/09918715

| Deplication No. US20030017157A1
| GENERAL INFORMATION:
| APPLICANT: Brad St. Croix
| APPLICANT: Brad St. Croix
| APPLICANT: Brad St. Croix
| APPLICANT: Brat Vogelstein
| APPLICANT: Kenneth Kinzler
| TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
| FILE REFERENCE: 1107.00134
| CURRENT APPLICATION NUMBER: US/09/918,715
| CURRENT FILING DATE: 2001-08-01
| PRIOR APPLICATION NUMBER: 60/22,599
| PRIOR APPLICATION NUMBER: 60/224,360
| PRIOR APPLICATION NUMBER: 60/284,360
| PRIOR FILING DATE: 2000-08-01
| PRIOR APPLICATION DATE: 2000-04-11
| NUMBER OF SEQ ID NOS: 358
| COPTMADE: 05 SEQ ID NOS: 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                             밁
                                                                                                                                                                             á
                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 13
US-09-918-715-194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                       닭
                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-918-715-194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ for Windows
SEQ ID NO 194
LENGTH: 562
TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 342;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                              187
                                                                                                                                                                                   189
                                                                                                                                                                                                                        127
                                                                                                                                                                                                                                                           129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
307
                                  309
                                                                                                            249
                                                                                                                                                                                                                                                                                               67
                                                                                                                                                                                                                                                                                                                                    69
                                                                                                                                                                                                                                                                                                                                                                                            9 LGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQ
                                                                                                                                                                                                                                                                                                                                                                           7
                 SVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPABESSE 364
                                                                                                                                                                                                                                                                                                                   LAHKFISDQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERAS
SVIITTTHCSDGSILAIALLVLFLLLALALLWWFWPLCCTVIIKEVPPPPVEESEE
                                                                                                                                                                      ARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRH
                                                                                                                                                                                                                                               EQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISS
                                                                                                                                              ARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRH
                                                                                                                                                                                                                                                                                               LAHRFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ESE 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ESE 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DGLSFISSSVIITTTHCSDXSILAIALLILXLLLALALLMWFWPLCCTVIIKEVPPPPAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE
                                                                       ARNVDRVLCSFKINDSVTLNEKPFAVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISS
                                                                                                                                                                                                                      EQIYYENSQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQL
                                                                                                                                                                                                                                                                                                                                                                       LGAGLRGLCVAALVLVCAGHGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                93.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Version
                                                                                                                                                                                                                                                                                                                                                                                                                                              6
                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1793; DB 3;
Pred. No. 1.4e-171;
6; Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 562;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                         306
                                                                                                              308
                                                                                                                                                246
                                                                                                                                                                                     248
                                                                                                                                                                                                                          186
                                                                                                                                                                                                                                                             188
                                                                                                                                                                                                                                                                                               126
                                                                                                                                                                                                                                                                                                                                      128
                                                                                                                                                                                                                                                                                                                                                                         66
                                                                                                                                                                                                                                                                                                                                                                                                             89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
```

RESULT 14 US-09-918-715-301

Publication No.

Application US/09918715 o. US20030017157A1

0

```
RESULT 15

US-10-474-794-194

Sequence 194, Application US/10474794

Publication No. US20040213793A1

GENERAL INFORMATION:

APPLICANT: Carson-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107,00179

CURRENT APPLICATION NUMBER: US/10/474,794

CURRENT FILING DATE: 2003-10-14

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR FILING DATE: 2001-08-01

PRIOR FILING DATE: 2001-08-01

NUMBER: OF SEO ID NUMBER: 60/308,829

PRIOR FILING DATE: 2001-08-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:

APPLICANT: Brad St. Croix

APPLICANT: Bert Vogelstein

APPLICANT: Kenneth Kinzler

TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT

FILE REFERENCE: 1107.00134

CURRENT APPLICATION NUMBER: US/09/918,715

CURRENT FILING DATE: 2001-08-01

PRIOR APPLICATION NUMBER: 60/222,599

PRIOR FILING DATE: 2000-08-02

PRIOR FILING DATE: 2000-08-11

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR FILING DATE: 2000-08-11

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR FILING DATE: 2000-04-11

NUMBER OF SEQ ID NOS: 358

SOFTWARE: F88tSEQ for Windows Version 3.0

SEQ ID NO 301

LENGTH: 562
                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Mouse
US-09-918-715-301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 342; Conserv
NUMBER OF SEQ ID NOS: 359
SOFTWARE: FastSEQ for Wind
SEQ ID NO 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  309 SVIITTHCSDGSILAIALLLLELLLALALLWWFWPLCCTVIIKEVPPPPPAEESEE 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             247
                                                                                                                                                                                                                                                                                                                                                                                                                                               307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LGIGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAHRFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERAS
                                                                                                                                                                                                                                                                                                                                                                                                                                           SVIITTTHCSDGSILAIALLVLFLLLALALLWWFWPLCCTVIIKEVPPPPVEESEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ARNVDRVLCSFKINDSVTLNEKPFAVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EQIYYENSQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93.7%;
ilarity 96.1%;
Conservative
                  for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1793; DB 3;
Pred. No. 1.4e-171;
6; Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PATTERNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 562;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
; LENGTH: 562
; TYPE: PRT
; ORGANISM: Mus :
US-10-474-794-194
                      δ
                                                   밁
                                                                             δ
                                                                                                             밁
                                                                                                                                                                   밁
                                                                                                                                                                                            Ś
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                   밁
맑
                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                          Matches 342; Conservative
                                                                                                                                                                                                                                                                                                                                                        Query Match 93.7%;
Best Local Similarity 96.1%;
                                                                                                            187
307
                          309
                                                     247
                                                                     249 ARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISS
                                                                                                                                         189
                                                                                                                                                                      127
                                                                                                                                                                                                  129
                                                                                                                                                                                                                              67
                                                                                                                                                                                                                                                         69
                                                                                                                                                                                                                                                                                  SVIITTHCSDGSILAIALLVLFLLLALALLWWFWPLCCTVIIKEVPPPPVEESEE
              SVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAEESEE 364
                                                      ARNIVDRVLCSFKINDSVTLNEKPFAVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISS
                                                                                                             ARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRH
                                                                                                                              ARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRH
                                                                                                                                                                    EQIYYENSQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQL
                                                                                                                                                                                      EQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQL
                                                                                                                                                                                                                             LAHRFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERAS
                                                                                                                                                                                                                                                      LAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERAS
                                                                                                                                                                                                                                                                                                                                                                                                                 musculus
                                                                                                                                                                                                                                                                                                                                         Score 1793; DB 4;
Pred. No. 1.4e-171;
6; Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                      Length 562;
                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                          Gaps
362
                                                                                                                                                                    186
                                                                                                                                                                                                  188
                                                                                                                                                                                                                              126
                                                                                                                                                                                                                                                       128
                                                                                                                                                                                                                                                                                                                 83
                                                                                                               246
                                                                                                                                         248
                                                                                                                                                                                                                                                                                     66
                                                        306
```

Search completed: December 14, Job time: 112.034 secs 2005, 11:58:58 THIS PAGE BLANK (USPTO)

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                  Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OM protein - protein search, using sw model
                                                                                                                                                                                                                     Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run on:
Published Applications AA_New:*

1: /cgn2 6/ptodata/1/pubpaa/USO9_NEW_PUB.pep:*

2: /cgn2 6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*

3: /cgn2 6/ptodata/1/pubpaa/USO7_NEW_PUB.pep:*

4: /cgn2 6/ptodata/1/pubpaa/USO7_NEW_PUB.pep:*

5: /cgn2 6/ptodata/1/pubpaa/USO7_NEW_PUB.pep:*

6: /cgn2 6/ptodata/1/pubpaa/USIO_NEW_PUB.pep:*

7: /cgn2 6/ptodata/1/pubpaa/USIO_NEW_PUB.pep:*

8: /cgn2 6/ptodata/1/pubpaa/USO0_NEW_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                51441 segs, 6734002 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                December 14, 2005, 11:18:48; Search time 5.40815 Seconds (without alignments)
458.218 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MATAERRALGIGFQWLSLAT.....VIIKEVPPPPAEESEENKIK 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2
1914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     51441
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

co
ŝ
3
₹
ሩ
ñ
M

Ś

121 HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV 180

Ş	岛 <i>성</i>	ያ ያ	Z m O	RESULT US-11-1 Seque Publi GENEE Appl Appl Appl Appl Appl Appl Appl Ap		
			Query Mat Best Loca Matches	RSULT 1  Sequence 199, Application US/111862  Sequence 199, Application US/111862  Publication No. US20050266493A1  GENERAL INFORMATION:  APPLICANT: Millennium Pharmaceutic  APPLICANT: Millendette, Tracy L.  APPLICANT: Kamatkar, Shubhangi  APPLICANT: Kamatkar, Shubhangi  APPLICANT: Monahan, John E.  APPLICANT: Monahan, John E.  APPLICANT: MONAHAN, JOHN E.  APPLICANT: MONAHAN, JOHN E.  APPLICANT: MONAHAN, JOHN E.  APPLICANT: MONAHAN, JOHN E.  APPLICANT: MONAHAN, JOHN E.  APPLICANT: MONAHAN, JOHN E.  APPLICANTION: METHODS FOR I  TITLE OF INVENTION: METHODS FOR I  TITLE OF INVENTION: METHODS FOR I  TITLE OF INVENTION UNMBER: US/11/  CURRENT APPLICATION NUMBER: US/11/  CURRENT FILING DATE: 2005-07-21  PRIOR APPLICATION NUMBER: US 60/36  PRIOR APPLICATION NUMBER: US 60/36  PRIOR APPLICATION NUMBER: US 60/36  PRIOR APPLICATION NUMBER: US 60/36  PRIOR APPLICATION NUMBER: US 60/36  PRIOR APPLICATION NUMBER: US 60/36  PRIOR APPLICATION NUMBER: US 60/36  PRIOR APPLICATION NUMBER: US 60/36  PRIOR APPLICATION NUMBER: US 60/36  PRIOR APPLICATION NUMBER: US 60/36  PRIOR SEQ ID NO 199  LENGTH: 564  TYPE: PRT  ORGANISM: Homo Sapiens  US-11-186-284-199		00000000000000000000000000000000000000
3	61	ــر ــر	26 36	-284-1 tion N, INFORMANT: MANT:	91.59 94.99 91.59 91.59 91.59 91.59 85.55 85.59 87.79 87.79 77.59 77.59 77.59 77.59	
E E	BI-S	MATA	Simil	NO. ADDITION OF THE PROPERTY O		
N N N N N N N N N N N N N N N N N N N	BIYYFVEQLAHKFI             BIYYFVEQLAHKFI	MATAERRALGIGFQWLS	Similarity 4; Conser	199, Application US/11186: ion No. US20050266493A1 INFORMATION: INFORM		5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Canadaloas	LAHK	<b>⇔</b>	vat			11 35 44 44 17 17 17 18 43 18 18 43 11 18 44 11 14 44 14 44 14 44 14 44 14 44 14 44 14 44 14 44 14 44 14 44 14 44 14 44 14 44 14 44 14 44 14 1
GNEA	70	IGFQWLSLATLVLICAGQGGRREDGGPACYGGFDLYFILDKSGSVLHHWN 	99.0 100. ive	ion US/11186284 0266493A1 Pharmaceutical 111son te, Tracy L. Shubhangi Robert John E. Verphen N. Lawrence J. Lawrence J. Loyel GENES, COM METHODS FOR IDE THERAPY OF COLO -02992RNM UMBER: US/11/18 2005-07-21 BER: US/60/301, 02-11-21 02-11-21 02-03-05 BER: US 60/361, 02-03-05 BER: US 60/381, 02-05-20 228 Windows Versio		1167 448 448 627 11627 11798 11798 11798 11798 1189 904 436 914 436 914 436 914 1889 11889 11889 11889 11889
3	SPQLRMSF]          SPQLRMSF]	SLA 	0 of 7	Ws 505 6 6 7 10 10 10 10 10 10 10 10 10 10 10 10 10		<b>のののこののののこのののこののここ</b> つ
į	MSFI	TT T	Score Pred 0; Mi	11186284 1.1 2	79	
VT 72	VFS]	Z = Z	re 1 ed. Misn	16284 1	TIG	11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
SVITALTING	RGT	Ö—Ö	re 1894; ed. No. 4 Mismatche	Inc SSITI TIFIC CANC CANC 284 4.0	ALIGNMENTS	00000000000000000000000000000000000000
12 E	X — X	RRED	έο ·	6284 icals, Inc	TS	2507030886050505050505050505050505050505050505
בייבטייב	FIVFSTRGTTLMKLTEC	4 	- 7	ON K		S-11-097-125-2 S-11-137-465-44 S-11-137-465-45 S-10-467-657-5432 S-10-995-561-1033 S-10-995-561-1034 S-10-913-786-2 S-10-513-786-1 S-10-513-786-1 S-10-793-626-1040 S-10-763-712A-25 S-10-467-657-437 S-10-467-657-437 S-10-392-234A-20 S-11-102-476-46 S-10-392-234A-20 S-11-793-626-2052
Ď.	REQ.	CYG  QYO	- 0;	KITS, ASSI		
SPEANS	IRQG	3FDL	Length Indel	AND		
d d d	1881 	YFII   	h 56	S, AND		
25	QKYI QKYI	DKSC 	0;			sequence seq sequence sequence sequence sequence sequence sequence sequence sequence sequence sequence
TVVCVCV	9—9 9—9 9—19	38 AT	ଦ୍ଧ	3VEN		
400	DREQIRQGLEELQKVLPGGDTYM	NAHE 	аря	PREVENTION,		2, Appli 44, Appl 45, Appl 5432, Ap 1033, Appl 1033, Appl 1034, Appli 1, Appli 1, Appli 5, Appli 5, Appli 5, Appli 5, Appli 5, Appli 5, Appli 6, Appli 1040, Appli 5, Appli 1040, Appli 1040, Appli 25, Appli 25, Appli 27, Appli 28, Appli 29, Appli 20, Appli 46, Appli 20, Appli
200	120	60	0	, AND		This is a second to be a second
	_		•-	₽		

```
RESULT 2
US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                  á
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                   RESULT 3
US-11-186-284-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4, Application US/11080026
Publication No. US20050260192A1
GENERAL INFORMATION:
APPLICANT: Springer, Timothy A.
APPLICANT: Shimacke, Motomu
APPLICANT: Shimacke, Motomu
APPLICANT: Lu, Chafen
TITLE OF INVENTION: MODIFIED POLYPEPTIDES STABILIZED IN A
TITLE OF INVENTION: DESIRED CONFORMATION AND METHODS FOR PRODUCING SAME
FILE REFERENCE: CFBF-P02-021
CURRENT APPLICATION NUMBER: US/11/080,026
CURRENT FILING DATE: 2001-08-31
PRIOR APPLICATION NUMBER: US 60/229,700
BRICK PILING DATE: 2001-08-31
PRIOR APPLICATION NUMBER: US 60/229,700
                Sequence 26, Application US/11186284
Publication No. US20050266493A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FREESEQ for Windows Version 4.0
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 60; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 1152
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                      201
                                                                                                                                                                                                                          258
                                                                                                                                                                                                                                                           150
                                                                                                                                                                                                                                                                                             200
                                                                                                                                                                                                                                                                                                                                                                 150
                                                                                                                                                                                                                                                                                                                               99
                                                                                                                                                                                                                                                                                                                                                                                                  44 DLYFILDKSGSVL-HHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTED----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSEREANRSRDLGAIVYCVGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLIWWEWPLCCTVIIKEVPPPPAE 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV 240
                                                                                                                                                                                      VNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHA 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ESEE 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVV
                                                                                                                                                                                                                           DGEKFGDPLGYEDVIPEADRE---
                                                                                                                                                                                                                                                           DGELHEDLFFYSE--REANRSRDLGAIVYCVGVKDFNETQLAR-----IADS--KDHVFP 200
                                                                                                                                                                                                                                                                                             FTFKEFQNNPNPRSLVKPITQLL--GRTHTATGIRKVVRELFNITNGARKNAFKILVVIT
                                                                                                                                                                                                                                                                                                                              -----REQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALT 149
                                                                                                                                                                                                                                                                                                                                                                 DIAFLIDGSGSIIPHDFRRMKEFVST-----VMEQLKKSKTLFS-----LMQYSEEFRIH
                                                                                                                                                      VNN-FEALKTIQNQLREK----IFAIEGTQTGSSSSFEHEMSQEGFSAA 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DGLSFISSSVIITTTHCSDGSILAIALLILFLLLALALLWWFWPLCCTVIIKEVPPPPAE
Berger, Allison
                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                7.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                   45; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                Score 145.5; DB 7;
Pred. No. 1.4e-05;
5; Mismatches 81;
                                                                                                                                                                                                                           -GVIRYVIGVGDAFRSEKSRQELNTIASKPPRDHVFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1152;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                                                                                                                                                                   98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ᅜ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                   US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Fa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
   NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                     609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              440
```

```
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Schlegel, Robert
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PRE
TITLE OF INVENTION: THERDED OF COLON CANCER
FILE REFERENCE: MPMOI-029PZRNM
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT APPLICATION NUMBER: US/11/186,284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR FILING DATE: 2002-11-21
PRIOR PPLICATION NUMBER: US 60/339,971
PRIOR PPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR PILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-11-186-284-26
CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR FILING DATE: 2004-02-14
PRIOR FILING DATE: 2004-12-14
PRIOR APPLICATION NUMBER: US04/015040
PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin version 3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/11057047 Publication No. US20050260198A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                              APPLICANT: Thurman, Joshua
APPLICANT: Taube, Christian
APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The Alternative Complement Pathway and
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Holers, Vernon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              212 IHSILKKSCIEI---LAA 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           500 VEDII-----EAINTFPYRGGSTNTGKAMTYVREKIFVPSK-GSRSNVPKVMILITDGK-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                154 HEDLFFYSEREANRSRDLGAIVYCYGVKDFNETQLARIAD--SKDHVFPVNDGFQALQGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98 DREQIRQGLEELQKVLP--GGDTYMHEGFERASEQIYYENRQGYRT--ASVIIALTDGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        44 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFST---RGTTLMKLTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DIVFLVDGSYSIGIANFVKVRAFLEVLVKSFEISPNRVQISLVQYSRDPHTEFTLKKFTK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SFELTQSICLRIEQELAA 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SSDAF---RDPAIKLRNSDVEIFAVGVKDAVRSELEAIASPPAETHVFTVED-FDAFORI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6.8%; Score 131; DB 7; Length 3063;
29.8%; Pred. No. 0.0014;
rive 38; Mismatches 75; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PREVENTION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AND
```

501

```
CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR RILING DATE: 2004-12-14
PRIOR APPLICATION NUMBER: US04/015040
PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn version 3.3
SEQ ID NO 1
LENGTH: 764
TYPE: PRT
ORGANISM: Homo Bapiens
US-11-057-047-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 5
US-11-057-047-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; LENGTH: 739
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                          ફ
                                                                         밁
                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/11057047 Publication No. US20050260198A1 GENERAL INFORMATION:
                                                                                                                                                                                      Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 5.9%;
Best Local Similarity 19.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Holers, Vernon
APPLICANT: Thurman, Joshua
APPLICANT: Taube, Christian
APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The Alternative Complement Pathway and
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            163
                                                                         243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    124 FERASEQIYYENR-----QGY-RTASVIIALTDG------ELHEDLFFYSE 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               221 IEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLL 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    278 YGVKP--RYGLVTYATYPKIWVKVSEADSSNADWVTKQLNEINYEDHKLKSGTNT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   72 KFISPQLRMSFIVFSTRGTTLMKLTE----DREQIRQGLEEL----QKVLPGGDTYMHEG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28 QGGRREDG-GPA-----CYGGFDLYFILDKSGSV-----LHHWNEIYYFVEQLAH 71
72 KFISPQLRMSFIVFSTRGTTLMKLTE----DREQIRQGLEEL----QKVLPGGDTYMHEG 123 : | | : | : | : | : | : |
                                                                                                                                                                h 5.9%; Score 113.5; DB 7;
Similarity 19.6%; Pred. No. 0.0079;
66; Conservative 63; Mismatches 109;
                                                                         EGVDAEDGHGPGEQQKRKIVLDPSGSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKVAS 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----IRPSKGHESCMG-----AVVSEYFVLTAAHC 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CPAPILKEVGMKAALQVSMNDGLSFISSSVIITTHC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RKNPREDYLDVYVFGVGPLVNQVNINALASKKDNEQHVFKVKD-MENLEDVFYQMIDES-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REANRSRDIGATVYCVG--VKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -KKALQAVYSMMSWPDDVPPEGWNRTRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EGVDAEDGHGPGEQQKRKIVLDPSGSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKVAS 277
                                                                                                                       QGGRREDG-GPA-----CYGGFDLYFILDKSGSV-----LHHWNEIYYFVEQLAH 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative 63; Mismatches 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 113.5; DB 7; Pred. No. 0.0076;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     317
                                                                                                                                                                                                               Length 764;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 739;
                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -YHKQPWQAKISV--
                                                                                                                                                                99;
                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: 821A
CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR FILING DATE: 2003-04-07
PRIOR FILING DATE: 2003-04-07
NUMBER OF SEQ ID NOS: 1704
SOFTWARE: pt_SEQ_genes Version 1.0
SEQ ID NO 1034
LENGTH: 798
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
    RESULT 7
US-10-131-826A-294
                                                                                                                                                                                         밁
                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 6
US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Homo sapiens US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1034, Application US/10821234
Publication No. US20050255114A1
GENERAL INFORMATION:
APPLICANT: Labat, Ivan
APPLICANT: Stache-Crain, Birgit
APPLICANT: Andarmani, Susan
APPLICANT: Tang, Y. Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                             281 CPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHC 317
                                                                                                                                                                                                                                       221 IEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLL 280
                                                                                                                                                                                                                                                                                                                               163 REANRSRDLGAIVYCVG--VKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 220
                                                                                                                                                                                                                                                                                                                                                                             390 -KKALQAVYSMMSWPDDVPPEGWNRTRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKD 448
                                                                                                                                                                                                                                                                                                                                                                                                                         124 FERASEQIYYENR-----QGY-RTASVIJALTDG-----ELHEDLFFYSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            337 YGVKP--RYGLVTYATYPKIWVKVSEADSSNADWVTKQLNEINYEDHKLKSGTNT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      277 EGVDAEDGHGPGEQQKRKIVLDPSGSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKVAS 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       221 IEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLL 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 163 REANRSRDIGATVYCVG--VKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           124 FERASEQIYYENR------QGY-RTASVIIALTDG------ELHEDLFFYSE 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            303 YGVKP--RYGLVTYATYPKIWVKVSEADSSNADWVTKQLNEINYEDHKLKSGTNT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             281 CPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHC 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72 KFISPQLRMSFIVFSTRGTTLMKLTE----DREQIRQGLEEL----QKVLPGGDTYMHEG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28 QGGRREDG-GPA-----CYGGFDLYFILDKSGSV-----LHHWNEIYYFVEQLAH 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ch 5.9%;
l Similarity 19.6%;
66; Conservative 63
                                                                                                                                                                                           -----QSLSLC----
                                                                                                                                                                                                                                                                                     RKNPREDYLDVYVFGVGPLVNQVNINALASKKDNEQHVFKVKD-MENLEDVFYQMIDES-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----IRPSKGHESCMG-----AVVSEYFVLTAAHC 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----QSLSLC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RKNPREDYLDVYVFGVGPLVNQVNINALASKKDNEQHVFKVKD-MENLEDVFYQMIDES-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -KKALQAVYSMMSWPDDVPPEGWNRTRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKD
                                                                                                 -IRPSKGHESCMG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 113.5; DB 6;
Pred. No. 0.0085;
3; Mismatches 109;
                                                                                                 -- AVVSEYFVLTAAHC
                                                                                                                                                                                      -GMVWEHRKGTD-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GMVWEHRKGTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 798;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ---YHKQPWQAKISV--
                                                                                                                                                                                           -YHKQPWQAKISV--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
```

162 389

17;

```
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; PRIOR FILING DATE: 1997-09-19
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 294
ENOTH: 915
TYPE: PRT
ORGANISM: Homo Sapien
US-10-131-826A-294
                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/05974
PRIOR FILING DATE: 1997-08-26
PRIOR PPLICATION NUMBER: 60/059113
PRIOR PILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
PRIOR PPLICATION NUMBER: 60/059127
PRIOR PPLICATION NUMBER: 60/059127
PRIOR PILING DATE: 1997-09-17
PRIOR PRIOR APPLICATION NUMBER: 60/059122
PRIOR PILING DATE: 1997-09-17
PRIOR PRIOR DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059184
PRIOR APPLICATION NUMBER: 60/059184
PRIOR PILING DATE: 1997-09-18
PRIOR PILING DATE: 1997-09-18
PRIOR PILING DATE: 1997-09-18
PRIOR PILING DATE: 1997-09-18
PRIOR PILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059352
PRIOR APPLICATION NUMBER: 60/059352
PRIOR APPLICATION NUMBER: 60/059352
PRIOR APPLICATION NUMBER: 60/0593588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 294, Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maur
APPLICANT: DeForge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/131,826A CURRENT FILING DATE: 2002-04-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                      171
                                                                        209
                                                                                                                                                               151 GELHEDLFFYSEREANRSRDLGAIVYCVGV--KDFNETQLARIADSKDHVFPVNDGFQAL
                                                                                                                                                                                                                114 FKRKSEVERAVKRMRHLSTGTMTGLAIQY---ALNIAFSEAEGARPLRENVPRVIMIVTD
                                                                                                                                                                                                                                                                                                              57
                                                                                                                                                                                                                                                            96 TEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYR-----TASVIIALTD
                                                                                                                                                                                                                                                                                                                                                        44 DLYFILDKSGSV-LHHWNEIYYF-VEQLAHKFISPOL-RMSFIVFSTRGTTL-----MKL
                                                                                                                                                                                                                                                                                                                                                                                                      55;
                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                             ETLTSVFQKKLCTAHMCSTLEHNCA--HFCINIPGSYVCRCKQGYILNSDQTTC--RIQD
                                                                      QGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHAR-----NVDRVLCSFKIND
                                                                                                                      GRPQDSV---
                                                                                                                                                                                                                                                                                                            DeForge, Laura
Desnoyers, Luc
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gao, Wei-Qiang
Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Godowski, Paul J. Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Beresini, Maureen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Watanabe,Colin K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/10131826A o. US20050245730A1
                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                         5.9%;
                                                                                                                    -AEVAAKARDTGILIFAIGVGQVDFNTLKSIGSEPHEDHVFLVAN-FSQI
                                                                                                                                                                                                                                                                                                                                                                                                      53; Mismatches 103;
                                                                                                                                                                                                                                                                                                                                                                                                                         Score 113.5; D
Pred. No. 0.01;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 6; Length 915;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                      35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AND NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                    225
                                                                                                                                                                  208
                                                                                                                                                                                                                  170
                                                                                                                                                                                                                                                              150
                                                                                                                                                                                                                                                                                                                                                            95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                 RESULT 9
US-10-601-368-24
                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-11-113-424-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-11-113-424-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Pat
SEQ ID NO 39
LENGTH: 956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/256,704
PRIOR FILING DATE: 2000-12-19
PRIOR FILING DATE: 2001-08-10
PRIOR FILING DATE: 2001-08-10
PRIOR FILING DATE: 2001-08-10
PRIOR PELICATION NUMBER: 60/257,314
PRIOR FILING DATE: 2000-12-20
PRIOR FILING DATE: 2001-08-10
PRIOR FILING DATE: 2011-08-10
PRIOR FILING DATE: 2011-08-10
PRIOR FILING DATE: 2011-08-29
PRIOR FILING DATE: 2011-08-29
PRIOR FILING DATE: 2011-08-29
PRIOR FILING DATE: 2011-08-29
Sequence 24, Application US/10601368
Publication No. US20050260702A1
GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Polypeptides and Nucleic Acids Encoding FILE REFERENCE: 21402-225
CURRENT APPLICATION NUMBER: US/11/113,424
CURRENT FILING DATE: 2005-04-21
PRIOR APPLICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 5.9%; Score 113.5; DB 7; Best Local Similarity 22.4%; Pred. No. 0.011; Matches 55; Conservative 53; Mismatches 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 39, Application US/11113424
Publication No. US20050260713A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 2001-05-02
NUMBER OF SEQ ID NOS: 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/307,506
PRIOR FILING DATE: 2001-07-24
PRIOR APPLICATION NUMBER: 60/322,358
PRIOR FILING DATE: 2001-09-14
PRIOR APPLICATION NUMBER: 60/294,075
PRIOR FILING DATE: 60/294,075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2001-05-29
PRIOR APPLICATION NUMBER: 60/288,153
PRIOR FILING DATE: 2001-05-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                            209
                                                                                                                                                                                                                                                                                                                                                                                                          171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   264 SVTLNE
                                                                                                                                                                                                                     282 LCAMED 287
                                                                                                                                                                                                                                                              264 SVTLNE 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                 151 GELHEDLFFYSEREANRSRDLGAIVYCVGV--KDFNETQLARIADSKDHVFPVNDGFQAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               114 FKRKSEVERAVKRMRHLSTGTMTGLAIQY---ALNIAFSEAEGARPLRENVPRVIMIVTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57 DLVFIIDSSRSVNTHDYAKVKEFIVDILQFLDIGPDVTRVGLLQY---GSTVKNEFSLKT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96 TEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYR-----TASVIIALTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       44 DLYFILDKSGSV-LHHWNEIYYF-VEQLAHKFISPQL-RMSFIVFSTRGTTL-----MKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PatentIn
                                                                                                                                                                                                                                                                                                              ETLTSVFQKKLCTAHMCSTLEHNCA--HFCINIPGSYVCRCKQGYILNSDQTTC--RIQD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LCAMED
                                                                                                                                                                                                                                                                                                                                                          QGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHAR-----NVDRVLCSFKIND
                                                                                                                                                                                                                                                                                                                                                                                                          GRPQDSV----AEVAAKARDTGILIFAIGVGQVDFNTLKSIGSEPHEDHVFLVAN-FSQI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      956;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
```

б 밁 á Ş

á

263 225 208 170 150

281

95

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
    Ş
                                                    밁
                                                                                              ঠ
                                                                                                                                                  밁
                                                                                                                                                                                             ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Mus musculus
US-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-601-368-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 199-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FREUSEQ for Windows Version 3.0
SEQ ID NO 24
                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 40
SOFTWARE: FRSESEQ for Windows Version 3.0
SEQ ID NO 22
LENGTH: 1166
TYPE: PRT
                                                                                                                                                                                                                                                                  Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 22, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local (
                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: PAI, YAING M.
APPLICANT: LOTE, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF FILE REFERNCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CCURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US/09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 1141
TYPE: PRT
ORGANISM: Mus musculus
       154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                159
                                                 195 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               217 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39 CYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT 96
                                                                                                   97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97 EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 153
                                                                                                                                                                                                                                              l Similarity
49; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                           CQTYMDIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL-
                                                                                                                                                                                CYGGFDLYFILDKSGSVLHHWNBIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CQTYMDIVIVLDGSNGI-YPWVEVQHFLINILKKFYIGFGQIQVGIVQYGEDAVHEFHL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EAAL---KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LARIADSKDHVFPVNDGFQALQG 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HED-----FNETQ 187
                                                                                              EDREQIRQGLEELQKVLPGGDTYMHEGFE----RASEQIYYENRQGYRTASVIIALTDGEL 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HDSPDLEKVIROSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD
                                                                                                                                                                                                                                         5.8%; Score 111; DB 6 ilarity 24.1%; Pred. No. 0.025; Conservative 28; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.8%; Score 111; DB 6; Length 1141;
24.1%; Pred. No. 0.024;
ative 28; Mismatches 88; Indels 3
       ----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQ 187
                                                                                                                                                                                                                                                                                         DB 6; Length 1166;
                                                                                                                                                                                                                                              88;
                                                                                                                                                                                                                                              Indels 38;
                                                                                                                                                  194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                          US-11-057-047-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; SEQ ID NO 21
; LENGTH: 1188
; TYPE: PRT
                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/11057047
Publication No. US20050260198A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21, App. Publication No.
APPLICANT: Holers, Vernon
APPLICANT: Thurman, Joshua
APPLICANT: Taube, Christian
APPLICANT: Taube, Christian
APPLICANT: Gelfand, Erwin
APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The Alternative Complement Pathway and
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2948-66
CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 60/636,239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: SIGNAL LOCATION: (1)...(22)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Mus musculus FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      335 EAAL---KDIVDALGDRIFSLEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188 LARIADSKDHVFPVNDGFQALQG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               275 HDSPDLEKVIROSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                217 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          159 CQTYMDIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            313 EAAL---KDIVDALGDRIFSLEG 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         188 LARIADSKOHVFPVNDGFQALQG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        253 HDSPDLEKVIRQSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97 EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           39 CYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ch 5.8%; Score 111; DB 6 l Similarity 24.1%; Pred. No. 0.026; 49; Conservative 28; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/10601368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQ 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 6; Length 1188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               216
```

```
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FRSUSEQ for Windows Version 3.0
SEQ ID NO 6
LENGTH: 1141
TYPE: PRT
  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT ; ORGANISM: Mus musculus US-11-057-047-6
                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 13
US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                              US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2004-12-14
PRIOR APPLICATION NUMBER: US04/015040
PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn version 3.3
SEQ ID NO 6
LENGTH: 761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                              Query Match
Best Local Similarity
Matches 49; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF FILE REFERENCE: 07334-275001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                              FEATURE:
NAME/KEY: SIGNAL
                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                                              LOCATION: (1)...(22)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             462 FYQMIDET-----KSLSLC-----GMVWEHKKGNDYHKQPWQAKISVT---RP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         350 TNT-----KRALQAVYSMMSWAGDAPPEGWNRTRHVIIIMTDG-LHNMGGNPVTVIQDI 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                293 -LIEKVASYGVRP--RYGLLTYATVPKVLVRVSDERSSDADWVTEKLNQISYEDHKLKSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        272 FSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHC 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    212 IHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  158 FFYSE--REANRSRD--LGAIVYCVG--VKDFNETQLARIADSKDHVFPVNDGFQALQGI 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240 EGADAEDGHSPGEQQKRKIVLDPS--GSMNIYLVLDGSDSIGSSNFTGAKRCLTN----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          64 YFVEQLAHKFISPQLAMSFIVFSTRGTTLMKLTEDR-----EQIRQGLEELQKVLPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28 QGGRREDG-------GPACYGGFDLYFILDKSGSV------LHHWNEIY
                                       39 CYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RALLDIGROPKNPREDYLDVYVFGVGPLVDSVNINALASKKDNEHHVFKVKD-MEDLENV
CQTYMDIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGVVQYGEDVVHEFHL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Јове М.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.8%; Score 110.5; DB 20.5%; Pred. No. 0.015; Pative 59; Mismatches
                                                                                                  5.6%;
                                                                                28;
                                                                                                  Score 107; DB 6; Pred. No. 0.058;
                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VSEYFVLTAAHC 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99;
                                                                                88;
                                                                                                                     Length 1141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels 117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    761;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       349
                                           96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   292
  216
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-601-368-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-601-368-4
                                                                                                                                                                                                                                                                                      US-10-601-368-3
                                                    Sequence 3, Application US/10601368
Publication No. US20050260702A1
GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Loza, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
BRIOR APPLICATION NUMBER: US/09/561,263A
BRIOR APPLICATION NUMBER: US/09/561,263A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 40
SOFTWARE: PREUSEQ for Windows
SEQ ID NO 4
LENGTH: 1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Pan, Yang
APPLICANT: LOTA, JOSE M.
APPLICANT: LOTA, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES '
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 4, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                  PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match 5.6%;
Local Similarity 24.1%;
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             217 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        195 NDYRSVKDVVÉAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES
                                                                                                                                                                                                                                                                                                                                                                                                                      188 LARIADSKDHVFPVNDGFQALQG 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97 EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39 CYGGFDLYFILDKSGSVLHHWNEIYYFVEOLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LARIADSKOHVFPVNDGFQALQG 210
                                                                                                                                                                                                                                                                                                                                                                             EAAL---KDIVDALGDRIFSLEG 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CQTYMDIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGVVQYGEDVVHEFHL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EAAL---KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HDSPDLEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                               HDSPDLEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFRNVTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ------FNETQ 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQ 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 107; DB (
Pred. No. 0.06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 6; Length 1166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   THEREOF
                                                                                                                                                        THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96
```

```
NUMBER OF SEQ ID NOS: 40

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 3

LENGTH: 1188

TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SIGNAL
LOCATION: (1)...(22)

US-10-601-368-3
                                                                                                 ફ
                                                                                                                                   유
                                                                                                                                                                                             片
                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                             망
Search completed: December 14, 2005, 11:59:26 Job time : 6.40815 secs
                                                                    밁
                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                               Query Match 5.6%; Score 107; DB 6; Length 1188; Best Local Similarity 24.1%; Pred. No. 0.061; Matches 49; Conservative 28; Mismatches 88; Indels 38; Gaps
                                                                  335 EAAL---KDIVDALGDRIFSLEG 354
                                                                                                 188 LARIADSKDHVFPVNDGFQALQG 210
                                                                                                                                       275 HDSPDLEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD 334
                                                                                                                                                                    154 HED------FNETQ 187
                                                                                                                                                                                                        217 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES 274
                                                                                                                                                                                                                                                                             97 EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 153
```



Sequence Sequence Sequence

Sequence Sequence Sequence Sequence

Sequence Sequence

Sequence

Sequence Sequence

Sequence Sequence Sequence Sequence Sequence

Sequence

Sequence Sequence Sequence Sequence

Sequence Sequence

Sequence

Sequence Sequence

Sequence

Sequence Sequence Sequence

Sequence Sequence Sequence

```
Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Command line parameters:

-MODEL-strame+ p2n.model -DEV-xlh
-MODEL-strame+ p2n.model -DEV-xlh
-Q-/cgn2_1/USETO_spool/US09970076/runat_14122005_111850_20999/app_query.fasta_1.2410
-DB=Issued_patents_NA -QFMT=fastap_SUFFIX=rn1 -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS-bits -START=1 -END=-1 -MATRIX-biDosum62 -TRANS-human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE-pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTPMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US09970076_@CGN_1 1_535_@runat_14122005_111850_20999 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -MAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -MARN_TIMEOUT=30 -THREADS=1 -XGAPDP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum |
Maximum |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM protein - nucleic search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                       score greater than and is derived by \varepsilon
                                                                                                                                                                                                                                                                                                                                               Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB seq length:
DB seq length:
              1392
962.5
891
859
859
240
166
                                                                                                                                                                                                            Score
                                                                                                                                                                                                                                                                                                                                                                              Issued_Patents_NA:*

1: /cgn2_6/ptodata/1/ina/1_COMB.seq:*

2: /cgn2_6/ptodata/1/ina/5_COMB.seq:*

3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

5: /cgn2_6/ptodata/1/ina/PTUS_COMB.seq:*

6: /cgn2_6/ptodata/1/ina/PTUS_COMB.seq:*

7: /cgn2_6/ptodata/1/ina/PE_COMB.seq:*

8: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*

9: /cgn2_6/ptodata/1/ina/Backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xgapop 10.0 , Y
Ygapop 10.0 , Y
Fgapop 6.0 , E
Delop 6.0 , E
                                                                                                                                                                                                                                                                                                                       is the number of results predicted by chance to have a ater than or equal to the score of the result being printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-2
1914
                                                                                                                                                                                                            Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MATAERRALGIGFQWLSLAT.....VIIKEVPPPPAEESEENKIK 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          December 18, 2005, 07:01:37; Search time 258.362 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1303057 segs, 888780828 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Maximum
Listing
                                                                    72.7
50.3
46.6
44.9
12.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000000000
              1609
2234
3981
1492
1492
1490
3519
3519
                                                                                                                                                                                                                                                                                                         analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match 100%
first 45 summaries
                                                                                                                                                                                                            DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Xgapext
Ygapext
Fgapext
Delext
          US-09-620-312D-8
US-10-104-047-659
US-09-799-451-250
US-09-774-528-297
US-10-120-988-297
US-10-131-827-8330
US-08-286-889-45
US-08-485-618-45
US-08-362-652-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          frame_plus_p2n model
                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (without alignments)
2531.884 Million cell updates/sec
        Sequence 8, Appli
Sequence 669, App
Sequence 250, App
Sequence 297, App
Sequence 297, App
Sequence 4330, App
Sequence 45, Appl
Sequence 45, Appl
Sequence 45, Appl
                                                                                                                                                                                                          Description
CURRENT FILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: 09/552,317
PRIOR PILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: 09/488,725
PRIOR FILING DATE: 2000-01-21
NUMBER OF SEQ ID NOS: 1105
SOFTWARE: pt_FL_genes Version 1.0
                                                                                                                         APPLICANT: Wang, Jian-Rui
APPLICANT: Zhou, Ping
APPLICANT: Mang, Junqing
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Zhiwei
APPLICANT: Wang, Zhiwei
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6569662el Nucleic Acids and
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 784CIPZB
CURRENT APPLICATION NUMBER: US/09/620,312D
CURRENT FILING DATE: 2000-07-19
CURRENT FILING DATE: 2000-07-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1
US-09-620-312D-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 8, Application US/09620312D Patent No. 6569662
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Tang, APPLICANT: Liu,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
                                                                                                                                                                                                                                                                                                                                                                                                    Asundi, Vinod
Zhang, Jie
Ren, Feiyan
Chen, Rui-hong
Zhao, Qing A.
Wehrman, Tom
                                                                                                                                                                                                                                                                                                                                                                Yang, Yonghong
                                                                                                                                                                                                                                                                                                                                                                                  Xue, Aidong J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , Chenghua
ndi, Vinod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Y. Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35514

35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-605-672-45
US-08-943-363-45
US-08-943-363-45
US-08-943-363-52
US-08-485-618-52
US-08-688-307A-52
US-08-688-307A-52
US-08-688-307A-2
US-08-688-307A-2
US-08-688-307A-2
US-08-485-618-96
US-08-482-293A-96
US-08-485-618-96
US-08-485-618-96
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
US-08-485-618-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ALIGNMENTS
```

```
TYPE: DNA
GRGANISM: Homo sapi
FEATURE:
NAME/KEY: CDS
LOCATION: (309)...(1
US-09-620-312D-8
                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best L
Query
DB:
                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
            á
                                     밁
                                                           ঠ
                                                                                                                                    밁
                                                                                                                                                          5
                                                                                                                                                                                      밁
                                                                                                                                                                                                       ર્
                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2 (1-368)
                                                                                     밁
                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No.:
                                      1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          309
                                                            241
                                                                                     969
                                                                                                                                      909
                                                                                                                                                             201
                                                                                                                                                                                      849
                                                                                                                                                                                                               181
                                                                                                                                                                                                                                      789
                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                       729
                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                        669
                                                                                                                                                                                                                                                                                                                                                                                        609
                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                        549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         369
              261
                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MetAlaThrAlaGluArgAlgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
                                                                                                                                                                                                                                                                                                                                                        HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                        GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                   ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                      LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                    SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                      ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGGCCACGGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
IleAsnAspSerValThrLeuAsnGlu
                                                                                                   IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                       GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                    ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                        CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                          CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                         AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2.04e-160
1392.00
100.00%
99.26%
72.73%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         x US-09-620-312D-8 (1-1609)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1609
267
2
0
0
                                      1088
                                                                                      1028
                                                                                                                                      968
                                                                                                                                                                                         908
                                                                                                                                                                                                                                       848
                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                        788
                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                        728
                                                                                                                                                                                                                                                                                                                                                                                          668
                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                           809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo US-10-104-047-669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 2
US-10-104-047-669
                           밁
                                               Ş
                                                                                  밁
                                                                                                           Ś
                                                                                                                                          밁
                                                                                                                                                              Ş
                                                                                                                                                                                                밁
                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2 (1-368)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 669, Application US/10104047
Patent No. 6943241
GEMERRAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. 6943241e1 full length
FILE REFERENCE: H1-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 4096
SOFTWARE: PATENTIN VET. 2.1
SEQ ID NO 669
LENGTH: 2234
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    М
О.:
                                                                                                                                                                                                                                                                                    103
                                                                                                                                                                                                                                                                                                                                                                                                                              655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             535
                                                                                                                                                                                                                                                                                                                                                                       715
                                                                                                                                                                                                                                                                                                                                           83
                                                                                                                                                                                                                                                                                                                                                                                                 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                         43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp
:::||||||
AAAGAGGCAAAGATATCCAGGTCACTTGGGGCTAGTGTTTATTGTGTTGGTGTCCTTGAT
                                                                                                                                                                                                                                                     AGTAAAGGCTTGGAGGATTTAAAACGTGTTAGTCCAGTAGGAGAGACATATATCCATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                            PheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerVallleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu
|||:::|||||||||||||||||||||
                                                                                                                                                                                                                                                                        ArgGlnGlyLeuGluCeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGlu
                                                                                                                                                                                                                                                                                                                                                                       AlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThrLeuValLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCAATGACTCGGTCACACTCAGTAAG
AspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGlu
                                                                                                                                                                                                                GlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla
                                                                                                                                                                                                                                                                                                                ATTGTGTTTTTCTTCTCAAGCAACTATTATTTTGCCATTAACTGGAGACAGAGGCAAAATC
                                                                                                                                                                                                                                                                                                                               IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIle
                           TTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAGCAAGTTTTCCCCTGTCAAA
                                                PheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsn
                                                                                                                                                                                                                                                                                                                                                                                     TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                           AGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTGGTGCCATCATATGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.88e-107
962.50
69.13%
51.91%
50.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                x US-10-104-047-669 (1-2234)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
                                                                                                                                                                                                   -----Cagaaagcaggaġġċttgaaaaċċċtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1115
                                                                                      1068
                                                                                                                                             1008
                                                                                                                                                                         162
                                                                                                                                                                                                   948
                                                                                                                                                                                                                                                                                    122
                                                                                                                                                                                                                                                                                                                  834
                                                                                                                                                                                                                                                                                                                                              102
                                                                                                                                                                                                                                                                                                                                                                                                    82
                                                                                                                                                                                                                                                                                                                                                                                                                                714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23
                                                                                                                                                                                                                                                           894
                                                                                                                                                                                                                                                                                                                                                                       774
```

```
APPLICANT: GOODATICH, RYJE
APPLICANT: ASUNDI, Vinod
APPLICANT: ASUNDI, Vinod
APPLICANT: Ren, Felyan
APPLICANT: Zhang, Jie
APPLICANT: Zhang, Jie
APPLICANT: Zhao, Qing A.
APPLICANT: Wang, Jidan-Rui
APPLICANT: Wang, Yunqing
APPLICANT: Wang, Yinding
APPLICANT: Wang, Zhiwei
APPLICANT: Wang, Zhiwei
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
APPLICANT: Wehrman, Tom
APPLICANT: Wehrman, Tom
APPLICANT: Ghosh, Reena
APPLICANT: Ghosh, Reena
APPLICANT: Ghosh, Reena
APPLICANT: Dunmanc, Radoje T.
TITLE OF INVENTION: No. 6783969el Nucleic Acids and
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 803
CURRENT APPLICATION NUMBER: US/09/799,451
NUMBER OF SEQ ID NOS: 948
SOFTWARE: pt_FL_genes Version 2.0
LENGTH: 3981
TYPE: DNA
          ; NAME/KEY: CDS
; LOCATION: (297)..(1118)
US-09-799-451-250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 250, Application
Patent No. 6783969
GENERAL INFORMATION:
APPLICANT: Tang, Y. Tom
APPLICANT: Zhou, Ping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
US-09-799-451-250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ई
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                            TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1609 AAAGAGGAAGAAGAA 1626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhou, Ping
Goodrich, Ryle
Asundi, Vinod
Ren, Felyan
Zhang, Jie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsn 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrpTrpPhe 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuSerPheIleSerSerSerValIleIleThrThrThrHisCysSerAspGlySerIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |||||||
ATCCTAGAATTGCAGCCCTCAAGTGTCTGTGTGGGGGAGGAATTTCAGATTGTCTTAAGT 1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ---GluGluSerGluGlu 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGCCCCTTTGCTGCAAAGTGGTTATTAAGGATCCTCCACCACCACCCCCCCTGCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TrpProLeuCysCysThrValIleIleLysGluValProProProProAla------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCATCATTGTTATTTTGGTGTTACTGCTACTCCTGGGGATCGGTTTGATGTGGTGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAACATATACAACGAGTGTAAAACCAGTAAGTGTACAGCTTAATTCTATGCTTTGTCCT 1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysPro 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValValValArg 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTGGATTTCAGGCTCTTAAAGGAATAATTAATTCTATACTAGCTCAGTCATGTACTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAATCTGTCATTTCAGGATCATTAATTGTCACAGCCACAGAATGTTCTAACGGGATCGCA 1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCAGTGAGCTTTÄATGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09799451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
APPLICANT: Ren, Feiyan
APPLICANT: Zhang, Jie
APPLICANT: Zhang, Jie
APPLICANT: Yang, Yonghong
APPLICANT: Yang, Yonghong
APPLICANT: Wehrman, Tom
APPLICANT: Wehrman, Tom
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Jian-Rui
APPLICANT: Drmanae, Radoje T.
APPLICANT: Drmanae, Radoje T.
TITLE OF INVENTION: No. 6743619el Nucleic Ac:
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 802
CURRENT APPLICATION NUMBER: US/09/774,528
CURRENT FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
SOFTWARE: pt_FL_genes Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 4
US-09-774-528-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-2 (1-368) x US-09-799-451-250 (1-3981)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                            Sequence 297, Application No. 6743619
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          353 GluValProProProProAlaGluGluSerGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    233 AlaGlyGluSerPheGlnValValArgGlyAsnGlyPheArgHisAlaArgAsnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        213 HisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGluProSerThrIleCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGGTCCCTCCACCCCCTGCCGAGGAGAGTGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCCTAGCCCTGGCTCCTCTGGTGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuLeuAlaLeuAlaLeuLeuTrpTrpPheTrpProLeuCysCysThrValIleIleLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrThrHisCysSerAspGlySerIleLeuAlaIleAlaLeuLeuIleLeuPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSerSerSerValIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLysGluValGlyMetLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AspArgValLeuCysSerPheLysIleAsnAspSerValThrLeuAsnGluLysProPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCACACACACTGTTCTGACGGTTCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTG
                                                                                                                                                                                                                                                                                        Liu, Chenghua
Asundi, Vinod
                                                                                                                                                                                                                                                                                                                          Zhou, Ping
Goodrich, Ryle
                                                                                                                                                                                                                                                                                                                                                                                                                Application US/09774528
                                                                                                                                                                                                                                                                                                                                                               Y. Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2.87e-98
891.00
100.00%
100.00%
46.55%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                               Acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62
```

```
TYPE: DNA
CORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (79)..(1434)
US-09-774-528-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2 (1-368) x US-09-774-528-297 (1-1492)
         á
                              밁
                                                 δ
                                                                        밁
                                                                                        δ
                                                                                                                밁
                                                                                                                                   Ś
                                                                                                                                                         밁
                                                                                                                                                                        5
                                                                                                                                                                                                ₽
                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No : :
                                                                                                                                                           550
                                                                                                                                                                                                                                                                                       370
                                                                                                                                                                                                                                                                                                           177
                                                                                                                                                                                                                                                                                                                                310
                                                                                                                                                                                                                                                                                                                                                    157
                                                                                                                                                                                                                                                                                                                                                                                                                                      117
                                                                                                                                                                                                                                                                                                                                                                                                                                                           136
                                                   297
                                                                                             277
                                                                                                                 610
                                                                                                                                     257
                                                                                                                                                                               237
                                                                                                                                                                                                     490
                                                                                                                                                                                                                         217
                                                                                                                                                                                                                                              430
                                                                                                                                                                                                                                                                 197
                                                                                                                                                                                                                                                                                                                                                                         250
                                                                                                                                                                                                                                                                                                                                                                                             137
                                                                                                                                                                                                                                                                                                                                                                                                                  196 GAGACATATATCCATGAAGGACTAAAGCTAGCGAATGAACAAATT-----CAGAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAGACAGAGGCAAAATCAGTAAAAGGCTTGGAGGATTTAAAACGTGTTAGTCCAGTAGGA
                                                                                                                                                                                                                                                                                                                                          LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                                                                                    CysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAsp
                                                                                                                                                                                                                                                                                                                                                                                                                             AspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg
:::||||||:::|||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAPATGAGATTATCTTTCATTGTGTTTTCTTCTCAAGCAACTATTATTTTGCCATTAACT
ValSerMetAsnAspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrHis
                                                                        ATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCA
                                                                                                                             CysSerPheLysIleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAsp
                                                                                                                                                                           PheGlnValValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeu
                                                                                                                                                                                                                     LysLysSerCysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSer
                                                                                                                                                                                                                                                                                     TGTGTTGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAG
                                                                                                                                                                                                                                                                                                                                GTGCCATCATATGCAGAGAAAGAGGCAAAGATATCCAGGTCACTTGGGGCTAGTGTTTAT
                                                                                                                                                                                                                                                                                                                                                                         GGAGGCTTGAAAACCTCCAGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                    GlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp
                                                                                   TGCACTTACACTGTAAATGAAACATATACAACGAGTGTAAAACCAGTAAGTGTACAGCTT
                                                                                                                                                            TTTCAGATTGTCTTAAGTGGAAGAGGATTCATGCTGGGCAGTCGGAATGGCAGTGTTCTC
                               ĠŦĠĀĠĊŦŦŦĀĀŦĠĠĀĠĠĀĀĀĀŦĊŦĠŦĊĀŤŦŦĊĀĠĠĀŦĊĀŦŦĀĀŤŦĠŦĊĀĊĀĠĊĊĀĊĀĠĀĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.97e-95
859.00
71.47%
52.88%
44.88%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1492
165
58
83
6
                                                                                                                                                             609
                                                                                                                                                                                                     549
                                                                                                                                                                                                                                               489
                                                                                                                                                                                                                                                                                       429
                                                                                                                                                                                                                                                                                                           196
                                                                                                                                                                                                                                                                                                                                369
                                                                                                                                                                                                                                                                                                                                                                          309
                                                                                                                                                                                                                                                                                                                                                                                                                                        136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96
                                                                                                                                      276
                                                                                                                                                                                256
                                                                                                                                                                                                                                                                  216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75
                                                                                                                                                                                                                                                                                                                                                                         ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (79)..(
US-10-120-988-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 5
US-10-120-988-297
                                                                      Ś
                                                                                             밁
                                                                                                              δ
                                                                                                                                       밁
                                                                                                                                                         Ś
                                                                                                                                                                                밁
                                                                                                                                                                                                δ
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                            ঠ
                          S
                                                   멍
                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                           Мо.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          357
                                                                                               196
                                                                                                                  117
                                                                                                                                                            97
```

```
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6919193el Nucleic Ac:
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 802CON
CURRENT FILING DATE: 2002-04-11
PRIOR APPLICATION NUMBER: 09/774,528
PRIOR APPLICATION NUMBER: 09/774,528
PRIOR FILING DATE: 2001-01-30
NUMBER: 09 SEQ ID NOS: 441
SOFTWARE: pt-FL_genes Version 2.0
SEQ ID NO 297
LENGTH: 1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2 (1-368) x US-10-120-988-297 (1-1492)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 6919193
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Tang, Y. APPLICANT: Goodric APPLICANT: Liu, Ch
                 157 LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                         136 GGAGACAGAGGCAAAATCAGTAAAAGGCTTGGAGGATTTAAAACGTGTTAGTCCAGTAGGA
                                                                                                                                                                                                                                                                                                297, Application US/10120988
), 6919193
                                                                                                                                                                                                                                                                                                                                                                             16 AATAACTGGATTGAAATTTATAATTTCGTACAGCAACTTGCGGAGAGATTTGTGAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                   57 HisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goodrich, Ryle
Liu, Chenghua
Ren, Feiyan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCACCCCCCCTGCACCAAAAGAGGAGGAAGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pro-----ProAlaGluGluSerGluGlu 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTTTGATGTGGTGGTTTTGGCCCCTTTGCTGCAAAGTGGTTATTAAGGATCCTCCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaLeuLeuTrpTrpPheTrpProLeuCysCysThrVallleIleLysGluValProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTTCTAACGGGATCGCAGCCATCATTGTTATTTTGGTGTTACTGCTACTCCTGGGGATC
GTGCCATCATATGCAGAGAAAAGAGGCAAAGATATCCAGGTCACTTGGGGGCTAGTGTTTAT
                                                                       GGAGGCTTGAAAACCTCCAGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTG 309
                                                                                         GlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp
                                                                                                                                                GAGACATATATCCATGAAGGACTAAAGCTAGCGAATGAACAAATT-----CAGAAAGCA
                                                                                                                                                                          AspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg
                                                                                                                                                                                                                                                   GluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wang, Dunrui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (1434)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.97e-95
859.00
71.47%
52.88%
44.88%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1492
165
58
83
6
                                                                                                              156
                                                                                                                                                    249
                                                                                                                                                                                                                             195
                                                                                                                                                                                                                                                                 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               849
                                                                                                                                                                                       136
                                                                                                                                                                                                                                                                                                      135
                                                                                                                                                                                                                                                                                                                                            96
                                                                                                                                                                                                                                                                                                                                                                               75
```

338 135

255 358 318 75 298

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
US-10-131-827-8330
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Wohlgemut, J
APPLICANT: Fry, Kirk
APPLICANT: Woodward, Ro
APPLICANT: Ly, Ngoc
                                                                                                Pred. No.:
                                                                                                             Alignment Scores:
                                                                                                                                                     ; ORGANISM: Homo sapiens
US-10-131-827-8330
                                                                                                                                                                                    TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING AUTOIMMUNE
TITLE OF INVENTION: CHRONIC INFLAMMATORY DISEASES
FILE REFERENCE: 506612000120
CURRENT APPLICATION NUMBER: US/10/131,827
CURRENT FILING DATE: 2002-09-06
PRIOR APPLICATION NUMBER: US 10/006,290
PRIOR FILING DATE: 2001-10-22
PRIOR APPLICATION NUMBER: US 60/296,764
PRIOR FILING DATE: 2001-06-08
NUMBER OF SEQ ID NOS: 9090
SOFTWARE: PALENTIN VerBion 3.1
SEQ ID NO 8330
LENGTH: 450
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 8330, Application US/10131827 Patent No. 6905827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaLeuLeuTrpTrpPheTrpProLeuCysCysThrValIleIleLysGluValProPro 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysLysSerCysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCACCCCCCCTGCACCAAAAGAGGAGGAAGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pro-----ProAlaGluGluSerGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTTTGATGTGGTGGTTTTGGCCCCCTTTGCTGCAAAGTGGTTATTAAGGATCCTCCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysSerAspGlySerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGCTTTAATGGAGGAAAATCTGTCATTTCAGGATCATTAATTGTCACAGCCACAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ThrTyrLeuLeuCysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysSerPheLysIleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAsp 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PheGlnValValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  H1sValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ValSerMetAsnAspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrHis 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTCAGTCATGTACTGAAATCCTAGAATTGCAGCCCTCAAGTGTCTGTGTGGGGGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTGTTGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fry, Kirk
Woodward, Robert
Ly, Ngoc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTTCTAACGGGATCGCAGCCATCATTGTTATTTTGGTGTTACTGCTACTCCTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCACTTACACTGTAAATGAAACATATACAACGAGTGTAAAAACCAGTAAGTGTACAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTCAGATTGTCTTAAGTGGAAGAGGATTCATGCTGGGCAGTCGGAATGGCAGTGTTCTC
 7.1e-20
240.00
65.17%
50.56%
12.54%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jay
                                   Length:
Matches:
Conservative:
Mismatches:
                     Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       364
 450
13
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  549
   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                          US-08-286-889-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-286-889-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2 (1-368) x US-10-131-827-8330 (1-450)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 45, Application US/08286889 Patent No. 5470953
                                                                                                                                                                                                                     TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                       FILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
ANAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 238,659
REFERENCE/DOCKET NUMBER: 27866/32168
                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/286,88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun ADDRESSEE: Marshall, O'Toole, G300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WERAL INFORMATION W. MICH.
APPLICANT: Gallatin, W. MICH.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5470953el
TITLE OF GROUENCES: 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy
                                                                                                               MOLECULE TYPE:
FEATURE:
                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                 TELEFAX: 25-3856
                                                                          NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                 TELEPHONE: 312-474-0448
                                                                                                                                                   STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                          LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            339 LeuTrpTrpPheTrpProLeuCysCysThrValIleIleLys-GluValProProProProPro...|||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             136 AACGGGATCGCAGCCATCATTGTTATTTTGGTGTTACTGCTACTCCTGGGGGATCGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                319 AspGlySerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             299 MetAsnAspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrHisCysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        279 LeuLeuCysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16 ATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCAGTGAGC
                                                                                                                                                                                      nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCTGCACCAAAAGAGGAGGAAGAA 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           oAlaGluGluSerGluGluAsnLys 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGTGGTGGTTTTGGTCCCTTTGCTGCTAAGTGGTTATTAAGGGATCCTCCACCACCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTÄÄTGGAGGÄAAATCTGTCÄTTTCÄGGATCÄTTAÄTTGTCÄCÄGCCÄCÄGAATGTTCT
                                                                                                                                                                                                        3519 base pairs
                                                                          CDS
52..3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Floppy disk
   2.42e-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                     08/173,497
Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 Integrin Alpha Subunit
   3519
```

ş

문 á 밁 र् 밁 ঠ 밁 ঠ 밁 á 밁 ş 밁 გ 밁

밁 δ 융

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                     RESULT 8
US-08-485-618-45
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-2 (1-368)
                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                    Sequence 45, Application US/08485618 Patent No. 5728533
                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Gallatin,
                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                               APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5728533el NUMBER OF SEQUENCES: 103
   COMPUTER READABLE FORM:
                                                CITY: Chicago
STATE: Illinois
                   COUNTRY: United ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                        1102 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                           220
                                                                                                                                                                                                                                                                                                                                                                                                                                           997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              130 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  56 ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ĊAĀ------ĠĠĊCTGĀĊĠŤĀĊACAGCCTCGĠĠĊATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProAlaCysTyrGly----GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                                                                                                                                                                                                                                                                                                                      ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGCGAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                                                                                                                                                                                                                        CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                 United States
                                                                                                                                                                                                                                                                                                                                                                          - ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     x US-08-286-889-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     166.00
46.15%
28.21%
8.67%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches:
Conservative:
                                                                                                                                                      Human
                                                                                                                                                    2 Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        & Borun
                                                                                                                                                      Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                              S
                                                                                                                   밁
                                                                                                                                                    Ş
                                                                                                                                                                                     밁
                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similari
                                                    멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2 (1-368) x US-08-485-618-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-485-618-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/3279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 3519 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 23-DEC-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: SIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE:
COMPUTER: II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                   149
                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                         541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                 130 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                           37
ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                  GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                    GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                        TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                    ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                                                                                                                                                                                                      LeuThrGluAspArg--
                                                                                                                                                                                                                                                                                                                                                                                        AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                        SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLy8
                                                                                                                                                                                                                                                                                                                                                         ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDS
52..3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2.42e-09
166.00
46.15%
28.21%
8.67%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                      GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
                                                                                                                                                                                                                        ----GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3519
66
42
96
30
```

148

129

720

765

```
RESULT 9
US-08-362-652-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             믕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                   US-08-362-652-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 45, Application US/08362652 Patent No. 5766850
                                                                                                                                                                              TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5766850el Human
NUMBER OF SEQUENCES: 93
                                                                    MOLECULE TYPE:
FEATURE:
                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                     NAME/KEY:
                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                        NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET:
                                                                                                                           STRANDEDNESS:
                                                                                                                                          TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Chicago
                                LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
                                                                                                                                                             LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1102 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGATGGGCAGAAATTCAGAGACCCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Illinois
                                                                                                                                                        3519 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3: Marshall, O'Toole, Gerstein, Murray & Borun
233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            United States
                                  52..3519
                                                                                                                     single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                           27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         936
                                                                                                                                                                                                                                      US-08-605-672-45
                                                                                                                                                                                                                                                     RESULT 10
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2 (1-368) x US-08-362-652-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                              Sequence 45, Application US/08605672 Patent No. 5817515 GENERAL INFORMATION:
                                                         APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5817515el H
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Ger
ADDRESSEE: Marshall, O'Toole, Ger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
..
                                    CITY:
                                                     STREET:
                                                                                                                                                                                                                                                                                           1102 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                           240 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                         997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          130 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               110 GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      56 ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            37
                 Chicago
Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGCT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAGATGGGCAGAAATTCAGAGACCCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuThrGluAspArg-------GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSexIleLeuLysLysSex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAA-----GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 94
                                                                                                                                                                                                                                                                                                                                                                                                 CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 239
                                                   233 South Wacker
United States
                                                                                                                                                                                                                                                                                                                                                                   ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.42e-09
166.00
46.15%
28.21%
8.67%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      - ĠĠĠATCĂTTCGCTATGCTATAĠĠĠĠŦĠGGAĠATGCCTTCCGGĠĀA
                                                     Drive,
                                                                    Gerstein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative:
                                                     6300
                                                                                                                           Human
                                                     Sear
                                                                                                                         2 Integrin
                                                                    Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3519
66
42
96
30
                                                                                                                         Alpha Subunit
```

825

1050

199 936 185 885 166

996

129

765

109 660

720

```
밁
                             Ş
                                                                 밁
                                                                                                δ
                                                                                                                                      밁
                                                                                                                                                                     ş
                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-2 (1-368) x US-08-605-672-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-605-672-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 45:
SEQUENCE CHARACTERISTICS:
LENGTH: 3519 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION NUMBER: US 08/362,652
APPLICATION NUMBER: US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION UNMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 530
PRIOR APPLICATION NUMBER: US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Мо
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 08/362,652 FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                   721
                                                                                                    110
                                                                                                                                                                                                             109
                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                      661 TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                         95
                                                                                                                                                                                                                                                75
                                                                                                                                                                                                                                                                                                                 56
                                                                                                                                                                                                                                                                                                                                                                                  37 ProAlaCysTyrGly----GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic acid
GAGCTATTTCATAGCAAGAATGGGGCCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                              GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                    GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                       LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu 109
                                                                                                                                                                                                                                            SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                                                                                                                               ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                             AĞCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                52..3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.42e-09
166.00
46.15%
28.21%
9.67%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/605,672
                                                                   ĠĠĊĊŢĠĂĊĠŤĂĊĄĊĄĠĊĊŢĊĠĠĠĊĄŢĊĊĄĠĄĄĄĠŢĠĠŢĠĄĄĄ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        3519
66
42
96
30
                                                                                                     129
                                  148
                                                                                                                                        720
                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                94
                                                                                                                                                                                                                                                                                                                 74
                                                                                                                                                                                                                                                                                                                                                    540
                                                                   765
```

```
RESULT 11
US-08-482-293A-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 45, Application US/08482293A Patent No. 5831029
                                                                                                                                                                                                                                        PILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,8
FILING DATE: 5-AUG-1994
PRIOR APPLICATION UMBER: US 08/362,6
PRIOR DATE: 21-DEC-1994
ATTORNEY AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IRM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, \
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/482,293/
FILING DATE:
CIRCUTTORIUM: 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                      TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5831029el Human
                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 3519 base pairs
                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS: ADDRESSEE: Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 233 St
CITY: Chicago
                                   TYPE: nucleic acid
STRANDEDNESS: sing
                                                                                                                                                                                 TELEPHONE:
                   TOPOLOGY:
                                                                                                                                                              TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1102 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ---ThrGlnLeuAlaArgIle-------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ------ÁTCTTTGCCATTGÁÁGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGCT-----GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCCGGGAA 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAGATGGGCAGAAATTCAGAGACCCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          233 South Wacker Drive,
                                                                                                                                                              312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               United States
                                                                                                                                                                                 312-474-6300
                                   single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Release #1.0,
                                                                                                                                                                                                                                                                                                                              US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                   US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                          US 08/286,889
                                                                                                                                                                                                                                    38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          O'Toole, Gerstein, Murray & Borun
cker Drive, 6300 Sear Tower
                                                                                                                                                                                                                           27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  219
```

```
RESULT 12
US-08-943-363-45
                                                                                                                                                                                        밁
                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         श
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-482-293A-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2 (1-368) x US-08-482-293A-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                     Sequence 45, Application US/08943363 Patent No. 5837478
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5837478el Human
NUMBER OF SEQUENCES: 114
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        М
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY:
                                                                                                                                                                                        1102
                                                                                                                                                                                                                                                           1051
                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                         220
                                                                                                                                                                                                                                                                                                                             997
                                                                                                                                                                                                                                                                                                                                                             200
                                                                                                                                                                                                                                                                                                                                                                                            937
                                                                                                                                                                                                                                                                                                                                                                                                                              186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                                                                                                                                                                        GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT
                                                                                                                                                                                                                      ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                           CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                              ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu 109
                                                                                                                                                                                                                                                                                       CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 239
                                                                                                                                                                                                                                                                                                                                                           ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGCT-----GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAA------GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                        -----ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 110:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
52..3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2.42e-09
166.00
46.15%
28.21%
8.67%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels:
Gaps:
                                 2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3519
66
42
96
30
                                                                                                                                                                                        1143
                                                                                                                                                                                                                        253
                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74
                                                                                                                                                                                                                                                                                                                           1050
                                                                                                                                                                                                                                                                                                                                                                                            996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                   밁
                                                                                                                                                                   á
                                                                                                                                                                                                                                      ঠ
                          5
                                                                                                 Ś
                                                                                                                                      밁
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                       US-09-970-076-2 (1-368) x US-08-943-363-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-943-363-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,49
PRIING DATE: 23-DEC-1993
PRIOR APPLICATION NUMBER: US 08/286,89
APPLICATION NUMBER: US 08/286,89
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,69
PRIOR APPLICATION NUMBER: US 08/362,69
PRIOR APPLICATION NUMBER: US 08/362,69
PRIOR APPLICATION NUMBER: US 08/362,69
PRIOR DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Mar
STREET: 233 Sc
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE:
 721
                                 110
                                                                     199
                                                                                                                                    601
                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                         75
                                                                                                                                                                                                                                         56
                                                                                                                                                                                                                                                                                                         37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     : Illinois
RY: United States
60606-6402
                               GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                     TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                      LeuThrGluAspArg-----
                                                                                                                                                                                                                                                                                           ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal 55
   CAA---
                                                                                                                                                                    SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 94
                                                                                                                                                                                                      GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                      ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                    AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3519 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        233 South
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
52..3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Marshall, O'Toole, Gerstein, Murray & Borun
3 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CDNA
                                                                                                                                                                                                                                                                                                                                                                              2.42e-09
166.00
46.15%
28.21%
8.67%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08/173,497
   GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               652
                                                                                                                                                                                                                                                                                                                                                                                            Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                           Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Version #1.25
                                                                                                   -GluGlnIleArgGlnGlyLeuGluGluLeu
```

109

660

600 74

129 720

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
US-09-193-043-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                   ક
                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/193,043
CURRENT FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER FILING DATE: 1994-12-21
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
NUMBER: 05 EQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                   US-09-970-076-2 (1-368) x US-09-193-043-45 (1-3519)
                                                                                                  Query Match:
                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 6251395el Human
FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn
SEQ ID NO 45
LENGTH: 3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 45, Application US/09193043 Patent No. 6251395
                                                                                                                                                                                                                                                     NAME/KEY: CDS
LOCATION: (52)..(3516)
FEATURE:
                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Mus
                                                                                                                                                                                                                                       OTHER INFORMATION: Description of Artificial Sequence: primer
                                                                                                                                                                      Хо
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            130 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                    37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
GAGATGTCACAAGAAĠĠŤŤŤĊAGCTCAĠĊŤCTCTCAATGĠÁŤ 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProvalAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGA
                                                                                                                                                                                                                                                                                                                     musculus
                                                                                                                                                                                                                                                                                                                                                                                       Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 1101
                                                                                                    2.42e-09
166.00
46.15%
28.21%
8.67%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
                                                                                    Indels:
Gaps:
                                                                                   3519
66
42
96
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              148
                    55
             PRIOR FILLING DATE: 1998-11-16
PRIOR PILLING DATE: 1996-02-22
PRIOR APPLICATION NUMBER: 08/605,672
PRIOR APPLICATION NUMBER: 08/173,497
PRIOR APPLICATION NUMBER: 08/286,889
PRIOR PILLING DATE: 1994-08-05
PRIOR PILLING DATE: 1994-08-05
PRIOR PILLING DATE: 1994-08-05
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR PILLING DATE: 1994-12-21
PRIOR APPLICATION NUMBER: 08/43,363
PRIOR APPLICATION NUMBER: 08/43,363
PRIOR FILLING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
```

```
US-09-688-307A-45
                                                                                                                                                                                                                                            Sequence 45, Application US/09688307A Patent No. 6432404
                                                                                                                                                                                                                   GENERAL INFORMATION:
CURRENT APPLICATION NUMBER: US/09/688,307A
CURRENT FILING DATE: 2000-10-13
PRIOR APPLICATION NUMBER: 09/193,043
                                                                                        APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENVION: NO. 6432404el Human Beta-2
FILE REFERENCE: 27866/36646
                                                                                                                                                                                                                                                                                                                                                                                                   1102 GAGATGTCACAAGAAĞĞTTTCAGCTCAĞCTCTCTCAATGĞAT 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   110 GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661 TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                            240 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           130 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ---ThrGlnLeuAlaArgIle-----AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ÀGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           · ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             - GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                  RESULT 15
US-09-350-259-45
                                                                                                                                     밁
                                                                                                                                                              8
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              १
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; NAME/KEY: CDS
; LOCATION: (52)..(3516)
; OTHER INFORMATION: Description
US-09-688-307A-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2 (1-368) x US-09-688-307A-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
Sequence 45, Application US/093502:
Patent No. 6620915
GENERAL INFORMATION:
APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĕ
                                                                                                                                     1102
                                                                                                                                                                                                                                                                                                                               937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                   997
                                                                                                                                                                                                                                                                                                                                                                 186
                                                                                                                                                                                                                                                                                                                                                                                                  886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                   220
                                                                                                                                                                                                                                                                                                                                                                                                                                167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus
                                                                                                                                     GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT
                                                                                                                                                                ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                     ---ThrGlnLeuAlaArgIle-------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                 CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal
                                                                                                                                                                                                                                                                   AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                ProvalAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                                                                                                  CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                   AAAGCT---
                                                                                                                                                                                                                                                                                                                                                                                                                               ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAA------GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                    ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.42e-09
166.00
46.15%
28.21%
8.67%
                                                                    US/09350259
                                                                                                                                                                                                                                                                                                                                                                                                  GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of Artificial Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3519
66
42
96
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 148
                                                                                                                                                                                                                                                                                                                                                                                                  936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: 27866/55004

CURRENT APPLICATION NUMBER: US/09/350,259

CURRENT FILING DATE: 1999-07-08

EARLIER APPLICATION NUMBER: 09/193,043

EARLIER FILING DATE: 1998-11-16

EARLIER FILING DATE: 1998-173,497

EARLIER FILING DATE: 1993-12-23

EARLIER FILING DATE: 1993-12-23

EARLIER APPLICATION NUMBER: 08/286,889

EARLIER APPLICATION NUMBER: 08/362,652

EARLIER APPLICATION NUMBER: 08/363,363

EARLIER FILING DATE: 1994-12-21

EARLIER FILING DATE: 1997-10-03

NUMBER OF SEQ ID NOS: 114

SOFTWARE: Patentin Ver. 2.0
                                               Ś
                                                                                  밁
                                                                                                                δ
                                                                                                                                                  밁
                                                                                                                                                                            5
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Description US-09-350-259-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2 (1-368) x US-09-350-259-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 3519
TYPE: DNA
ORGANISM: Mus musculus
FEATURE:
NAME/KEY: CDS
LOCATION: (52)..(3516)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OF INVENTION: No. 6620915el Human
                                                                                                                                                  826
                                                                                                                                                                                 149
                                                                                                                                                                                                                                                  130
                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                   766
                                                                                                                                                                                                                                                                                                                                                                                 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                 75
                  ---ThrGlnLeuAlaArgIle----
                                                                                                                                                                            ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                  GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTĠĊCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                               GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                              GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal 55
                                                                                                    ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu
                                                                                                                                                    ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGA
                                                                                                                                                                                                                                                                                                                                                   TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                 LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu 109
                                                                                                                                                                                                                                                                                                                                                                                                                   AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.42e-09
166.00
46.15%
28.21%
8.67%
3
                                                                                                                                                                                                                                                                                    GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of Artificial Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                     ----AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3519
66
42
96
30
```

720

94

600

74 540

825

166

885

199

936

primer

```
-MODEL-Frame+ p2n. model - DEV=xlh
-Q0=/G9n2 1/USPTO spool/US09970076/runat 14122005 111852 21035/app query.fasta_1.2410
-Q4=/G9n2 1/USPTO spool/US09970076/runat 14122005 111852 21035/app query.fasta_1.2410
-DB=PublIshed_Applications_NA_Main -QFMT=fastap -SUFFIX=rnpbm -mINMATCH=0.1
-LOOPEXT=0 -UNITS=blits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cd1 -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -QUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=2000000000 -USER=US09970076 @CGN 1 1 2715 @runat 14122005 111852_21035
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Command line parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                           Score
                         1914
1914
1914
1894
1894
1894
1894
                                                                                                                                                                                                                                                                                                                                                                    Published_Applications_NA_Main:*

1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*

2: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

7: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

10: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
        100.0
100.0
99.0
99.0
99.0
                                                                                                                                                                                        Match Length
                                                                                                                                                                                                          Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2
1914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    December 18, 2005, 07:35:12; Search time 1178.98 Seconds (without alignments) 2581.163 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MATAERRALGIGFQWLSLAT......VIIKEVPPPPAEESEENKIK 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9793542 seqs, 4134689005 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen
      1414
1454
1454
5540
5540
5540
5540
                                                                                                                                                                                           띪
  0 US-11-047-278-1

US-10-133-937-58

US-10-159-563-58

US-09-918-715-176

US-09-918-715-231

US-10-301-822-198

US-10-474-794-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     summaries
                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19587084
Sequence 1, Appli
Sequence 58, Appl
Sequence 58, Appl
Sequence 176, App
Sequence 231, App
Sequence 198, App
Sequence 176, App
Sequence 231, App
                                                                                                                                                                                      Description
                                                                                                                                                                                                                                        APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR FILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 11
                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
US-11-047-278-1
      Percent Similarity:
                                                                                                         US-11-047-278-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/11047278
Publication No. US20050196407A1
                                                                                                                          LENGTH: 1414
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (104)...(1207)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.87e-229
1914.00
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           55540
55220
55220
55220
55220
55220
11650
11650
11650
11650
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
11056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \sigma\sigma\sigma\sigma\sigma\sigma\sigma\sigma\sigma\sigma\sigma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-979-159-176
US-11-0477-278-5
US-19-918-715-186
US-09-918-715-186
US-09-918-715-186
US-10-474-794-186
US-10-474-794-300
US-10-979-159-186
US-10-201-292-17
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-25
US-10-201-292-25
US-10-201-292-25
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ALIGNMENTS
    Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 176, App
Sequence 5, Appli
Sequence 186, App
Sequence 186, App
Sequence 186, App
Sequence 186, App
Sequence 186, App
Sequence 186, App
Sequence 186, App
Sequence 186, App
Sequence 17, Appl
Sequence 17, Appl
Sequence 13, Appl
Sequence 15, Appl
Sequence 15, Appl
Sequence 21, Appl
Sequence 19, Appl
Sequence 19, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 21, Appl
Sequence 25, Appl
Sequence 27, Appl
Sequence 28, Appl
Sequence 27, Appl
Sequence 28, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 25, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
```

Regult

360

```
Best I
Query
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
밁
                  á
                                        밁
                                                             ঠ
                                                                                      밁
                                                                                                      ঠ
                                                                                                                                  밁
                                                                                                                                                   5
                                                                                                                                                                              밁
                                                                                                                                                                                              δ
                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2 (1-368) x US-11-047-278-1 (1-1414)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local S
y Match:
                                           1004
                  321
                                                               301
                                                                                      944
                                                                                                                                   884
                                                                                                                                                                                824
                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                    644
                                                                                                                                                                                                                                                                                                                                                                584
                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                            524
                                                                                                                                                                                                                                                                                                                                                                                                                                                       464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       164
                                                                                                            281
                                                                                                                                                        261
                                                                                                                                                                                                                           764
                                                                                                                                                                                                                                                 221
                                                                                                                                                                                                                                                                        704
                                                                                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         μ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MetAlaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
                                                                                                                                                                                                                           GlnIleArgGlnGlyLeuGluLeuGlnLy8ValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluIleTyrTyrPheValGluGlnLeuAlaHiBLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
          SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuAlaLeuTrp
                                          CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                   ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                               LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                 TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                             SerGluArgGluAlaAsnArgSerArgAapLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                         ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAPATCTATTACTTTGTGGAACAGTTGGCTCACAPATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGCCACGGCGGAGCGGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                        TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                 GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                             ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      000
                                           1063
                                                                                        1003
                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                             583
                                                                                                                                                                                                                                                                                                                                                                                                                                   160
                                                                                                                                                                                                                                                                                                                                                                                                                                                         523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   163
                                                                                                                                   943
                                                                                                                                                         280
                                                                                                                                                                                883
                                                                                                                                                                                                      260
                                                                                                                                                                                                                             823
                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                        763
                                                                                                                                                                                                                                                                                              220
                                                                                                                                                                                                                                                                                                                    703
                                                                                                                                                                                                                                                                                                                                           200
                                                                                                                                                                                                                                                                                                                                                                643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           283
                                                                                                                                                                                                                                                                                                                                                                                      Query
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 2
US-10-133-937-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
유
                                                            Ş
                                                                                      멂
                                                                                                      8
                                                                                                                                   밁
                                                                                                                                                       Ş
                                                                                                                                                                                밁
                                                                                                                                                                                                S
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA
; ORGANISM: Homo
US-10-133-937-58
                                   밁
                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2 (1-368)
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 58, Application US/10133937

Publication No. US20030207278A1

GENERAL INFORMATION:

APPLICANT: Khan, Javed
APPLICANT: Ringner, Markus
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: POURT MAINTION: DIAGNOSING, PROGNOSTICATING, AND/OR PREDICTING DISEASES AND
TITLE OF INVENTION: OTHER BIOLOGICAL STATES
FILE REFERENCE: 11613.56US01
CURRENT FILING DATE: 2002-11-04
NUMBER OF SEQ ID NOS: 99
SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 58
LENGTH: 1454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               341
564
                                                                                                                                                                                                                                                                                                                      144
                    141
                                                                  121
                                                                                       444
                                                                                                               101
                                                                                                                                     384
                                                                                                                                                                                324
                                                                                                                                                                                                                             264
                                                                                                                                                                                                                                                                          204
                                                                                                                                                         81
                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                     LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluSerGluGluAsnLysIleLys
                                                                                                                                    CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAGTGAGGAAAATAAAATAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTTCTGGCCCCTCTGCCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TrpPheTrpProLeuCysCysThrValIleIleLysGluValProProProProAlaGlu
ThralaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                        HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                        CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                     GlnIleArgGlnGlyLeuGluLeuGlnLy8ValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                  GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                              GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                      5.1e-229
1914.00
100.00%
100.00%
100.00%
6
                                                                                                                                                                                                                                                                                                                                                                x US-10-133-937-58 (1-1454)
                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1207
                                                                                                                                                                                                                                                                                                                                                                                      1454
368
0
0
```

443

100 383 80 323 60 26

140 503 120

563

623

40

```
RESULT 3
US-10-159-563-58
US-10-159-563-58
Sequence 58, Application US/10159563
; Publication No. US20040009154A1
; GENERAL INFORNATION:
APPLICANT: Khan, Javed
APPLICANT: Khan, Javed
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Meltzer, Paul
; TITLE OF INVENTION: SELECTIONS OF GENES AND METHODS OF USING THE SAME FOR
TITLE OF INVENTION: DIAGNOSIS AND FOR TARGETING THE THERAPY OF SELECT CANCERS
; FILE REFERENCE: 11613.56USI1
; CURRENT FILING DATE: 2002-12-09
PRIOR APPLICATION NUMBER: US/10/159,563
; CURRENT FILING DATE: 2002-04-25
; NUMBER OF SEQ ID NOS: 444
; SOPTWARE: PATENTIN VERSION 3.1
; SEQ ID NO 58
; LENGTH: 1454
; TYPE: DNA
; ORGANISM: Homo mapiens
US-10-159-563-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ક
                        Alignment Scores
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                   음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
 Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                     1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1044
                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ValasnaspGlyPheGlnalaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                    GAGAGTGAGGAAAATAAAATAAAA 1247
                                                                                                                                                                                                                                                                                                                                                                                GluSerGluGluAsnLysIleLys 368
                                                                                                                                                                                                                                                                                                                                                                                                                               TrpPheTrpProLeuCysCysThrValIleIleLysGluValProProProProAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuAlaLeuTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rccarccreeccarceccrearccrearccreeccaaeccreeccreeccree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGGTGTG
5.1e-229
1914.00
100.00%
Length:
Matches:
Conservative:
                                                                                                                                                                                                                 CANCERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1043
                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                   S
                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity:
Query Match:
DB:
                                               문
                                                                      S
                                                                                                밁
                                                                                                                                                  밁
                                                                                                                                                                     S
                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2 (1-368)
 1104
                       321
                                                                                                                                                    924
                                                                                                                                                                                                    864
                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                            221
                                                                                                                                                                                                                                                                                                     744
                                                                                                                                                                                                                                                                                                                             201
                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                         624
                                                                                                                                                                                                                                                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                                                                                                                                                         564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              324 GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               204 CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ThralaSerValIleIleAlaLeuThraspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
AspGlyLeuSerPheIleSerSerSerVallleIleThrThrThrHisCysSerAspGly
                                                                                                               CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                                                 IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                    GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                 ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                     ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                  | IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                     AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                       LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                       SerGluargGlualaasnargSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                  TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                    ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-159-563-58 (1-1454)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             000
                        340
                                                   1103
                                                                                                   1043
                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             443
                                                                          320
                                                                                                                                                    983
                                                                                                                                                                           280
                                                                                                                                                                                                    923
                                                                                                                                                                                                                                                      863
                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                     803
                                                                                                                                                                                                                                                                                                                                                                                200
                                                                                                                                                                                                                                                                                                                                                                                                         683
                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  203
                                                                                                                                                                                                                             260
                                                                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                       743
                                                                                                                                                                                                                                                                                                                                                                                                                                                           623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          563
```

밁 S 밁

200

```
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/09/918,715
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-02
PRIOR RPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/284,360
PRIOR FILING DATE: 2000-04-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOPTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 176
LENGTH: 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
US-09-918-715-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-918-715-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2 (1-368) x US-09-918-715-176 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 176, Application US/09918715 Publication No. US20030017157A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Brad St. Croix APPLICANT: Bert Vogelste
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                      504
                                                                     121
                                                                                                      444
                                                                                                                                        101
                                                                                                                                                                          384
                                                                                                                                                                                                                                             324
                                                                                                                                                                                                                                                                                                               264
                                                                                                                                                                                                                                                                                                                                                                                  204
                                                                                                                                                                                                                                                                                                                                                                                                                                                    144 ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                             13
                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluSerGluGluAsnLysIleLys 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TrpPheTrpProLeuCysCysThrVall1eIleLysGluValProProProProAlaGlu 360
                                                                                                      GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                               SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                  GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                    LeuValLeuIleCy8AlaGlyGlnGlyGlyArgArgGluAspGlyGlyFroAlaCy8Tyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetAlaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
                                                          HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                          TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGA
                                                                                                                                                                                                                                             GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                  CTGGTGCTCATCTGCGCCCGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                      CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.48e-225
1894.00
100.00%
100.00%
98.96%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3540
364
0
                                                                      140
                                                                                                      503
                                                                                                                                        120
                                                                                                                                                                           443
                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                                                                                    203
                                                                                                                                                                                                                                               383
                                                                                                                                                                                                                                                                               80
                                                                                                                                                                                                                                                                                                                                                                                  263
Sequence 231, Application US/09918715

Sequence 231, Application VS/09918715

Publication No. US20030017157A1

GENERAL INFORMATION:
APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler

TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134

CURRENT APPLICATION NUMBER: US/09/918,715

CURRENT APPLICATION NUMBER: 60/222,599

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR FILING DATE: 2000-08-11

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR FILING DATE: 2000-08-11

PRIOR FILING DATE: 2000-08-11

PRIOR FILING DATE: 2000-04-11

NUMBER OF SEQ ID NOS: 358

SOFTWARE: FASCEQ for Windows Version 3.0

SEQ ID NO 231

LENGTH: 5540

TYPE: DNA

ORGANISM: Homo sapiens

US-09-918-715-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-918-715-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1224 GAGAGTGAGGAA 1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GluSerGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACCACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TrpPheTrpProLeuCysCysThrValIleIleLysGluValProProProProAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               623
```

360

983

923 260 863

Ś

Ś 밁 Ś 밁

밁 S 밁 ş 밁 र् 밁 5 밁

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
              S
                                      밁
                                                           र्
                                                                                        밁
                                                                                                         र्
                                                                                                                                       용
                                                                                                                                                           ð
                                                                                                                                                                                        В
                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                         몽
                                                                                                                                                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2 (1-368) x US-09-918-715-231 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Х
О
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scores:
                                                                                                              261
                                                                                                                                                                                           804
                                                                                                                                                                                                                                                                                            684
                                                                                                                                                                                                                                                                                                                                             624
                                                                                                                                                                                                                                                                                                                                                                                               564
                                                                                                                                                                                                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                                                                                                                                                                                                                 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         144
              301
                                       984
                                                             281
                                                                                        924
                                                                                                                                        864
                                                                                                                                                                 241
                                                                                                                                                                                                                 221
                                                                                                                                                                                                                                           744
                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 _
                                                                                                     | IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                        IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                          LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                               ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlyGlyPheAspLeuTyrPheIleLeuAapLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCACGGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetAlaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
AspG1yLeuSerPheIleSerSerSerValIleIleThrThrThrHisCysSerAspG1y
                                                    CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                                        ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                        ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                             SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               H1sGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                           GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                            ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                             GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                             ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                              TCAGAGAGGGAAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAGACAGAGAA
                                                                                         ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.48e-225
1894.00
100.00%
100.00%
100.00%
98.96%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0000
                                       1043
                                                                                                                                                                                                                                           803
                                                                                                                                                                                                                                                                                            743
                                                                                                                                                                                                                                                                                                                                               683
                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                 563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100
                                                                                         983
                                                                                                                                           923
                                                                                                                                                                 260
                                                                                                                                                                                           863
                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                    220
                                                                                                                                                                                                                                                                                                                      200
                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         203
```

```
Sequence 198, Application US/10301822
Publication No. US20030148410A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: MONAHAN, John E.
APPLICANT: MONAHAN, John E.
APPLICANT: MONAHAN, John E.
APPLICANT: MONAHAN, John E.
APPLICANT: MONAHAN, John E.
APPLICANT: MONAHAN, John E.
APPLICANTON: METHODS FOR IDENTIFICATION, ASSESSMENT, PREV
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREV
CURRENT APPLICATION NUMBER: US/10/301,822
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                   밁
                                                                                       S
                                                                                                                                                         밁
                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
US-10-301-822-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2 (1-368) x US-10-301-822-198 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1044 GATGGCCTCTCTTTATCTCCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                    264
                                                                                                                                                                                                                                                               144 ATGCCCACGCCGAGAGCCCTCCGCATCGCCTTCCAGTGCCTCTCTTTGGCCACT
                                                                                                  41
                                                                                                                                                                                                             21
  61
                                                                                                                                                                                                                                                                                                                   <u>سو</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAGTGAGGAA 1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluSerGluGlu 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCATCCTGGCCATCGCCTGCTGATCCTGTTCCTGCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                       LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TrpPheTrpProLeuCysCysThrValIleIleLysGluValProProProProAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                  GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                            CTGGTGCTCATCTGCGCCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                             MetAlaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGTTCTGGCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                           1.48e-225
1894.00
100.00%
100.00%
98.96%
                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                        364
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PREVENTION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1163
     80
                                                         323
                                                                                                        60
                                                                                                                                                               263
                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                       203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AND
```

```
RESULT 7

US-10-474-794-176

¡Sequence 176, Application US/10474794

¡Publication No. US20040213793A1

¡GENERAL INFORMATION:
¡APPLICANT: Carson-Walter, Eleanor
¡APPLICANT: Vogelstein, Bert
¡APPLICANT: Kinzler, Kenneth
; APPLICANT: Kinzler, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                         중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                               밁
                                                                                                                                                                   중 유
                                                                                                                                                                                                             중 음 중
                                                                                                                                                                                                                                                                        8 8 8 8
                                                                                                                                                                                                                                                                                                                                                       음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                           ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                밁
                                                                                                                             δ
                                                                                                                                                         1164
                                                                                                                                                                                               1104
                                                                                                                                                                                                                                       1044
                                                                                                                                    361
                                                                                                                                                                           341
                                                                                                                                                                                                                   321
                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                             984
                                                                                                                                                                                                                                                                                                 281
                                                                                                                                                                                                                                                                                                                     924
                                                                                                                                                                                                                                                                                                                                         261
                                                                                                                                                                                                                                                                                                                                                             864
                                                                                                                                                                                                                                                                                                                                                                                                     804
                                                                                                                                                                                                                                                                                                                                                                                                                      221
                                                                                                                                                                                                                                                                                                                                                                                                                                            744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                324
                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                     | IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                     LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThralaSerValIleIleAlaLeuThraspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAGTGAGGAA 1235
                                                                                                                            GluSerGluGlu
                                                                                                                                                                  TrpPheTrpProLeuCysCysThrVallleIleLysGluValProProProProAlaGlu
                                                                                                                                                                                                recarecreecearecerearecrerrecreeraseceresererecres
                                                                                                                                                                                                           SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                                                                                                                                                                                                                                                                                                                                                            GTGAGAGGAAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                       ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGAGAGGGGAAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                         TGGTTCTGGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                     ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                    364
    PATTERNS
                                                                                                                                                                                               1163
                                                                                                                                                                                                                                       1103
                                                                                                                                                                                                                                                                               1043
                                                                                                                                                         1223
                                                                                                                                                                                                                   340
                                                                                                                                                                                                                                                           320
                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                       983
                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                             803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 383
                                                                                                                                                                                                                                                                                                                                                              923
                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                      863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 176
LENGTH: 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment :
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Homo
US-10-474-794-176
                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                        片
                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                           Ş
                                              밁
                                                                    Ş
                                                                                            멍
                                                                                                          S
                                                                                                                                    밁
                                                                                                                                                    5
                                                                                                                                                                            밁
                                                                                                                                                                                         5
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2 (1-368)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scores:
                                                                                                                                                                                                                                                                                                                                         324
                                                                                                                                                                             564
                                                                                                                                                                                                                     504
                                                                                                                                                                                                                                                           444
                                                                                                                                                                                                                                                                                                   384
                                                                                                                                                                                                                                                                                                                                                                                                                         204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 144
               804
                                                                          201
                                                                                              684
                                                                                                                 181
                                                                                                                                      624
                                                                                                                                                         161
                                                                                                                                                                                                141
                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                  264
                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ш
                                                                                                                                                                                                                                                                                                                                                                                                                         LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGGCCACGGCGAGACGCGAGAGCCCTCGGCATCCGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                   HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                  MetAlaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
                                                                                                                                    GlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                 GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                         | IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                     GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                 ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                               AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                         LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                           GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
               <u>ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.48e-225
1894.00
100.00%
100.00%
100.00%
98.96%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        x US-10-474-794-176 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5540
364
0
0
```

803

220

240 863 563 160 623 180 180 200 443 120

503

80

263 60 323

383

```
APPLICANT: Carson Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
FRIOR APPLICATION NUMBER: 60/382,850
PRIOR APPLICATION NUMBER: 60/382,850
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 231
LENGTH: 5540
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
              ঠ
                                        밁
                                                            ঠ
                                                                                         밁
                                                                                                              Ś
                                                                                                                                                                                                                    Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 8
US-10-474-794-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                          US-09-970-076-2 (1-368)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 231, Application US/10474794 Publication No. US20040213793A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             321
                                                                                          144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              864
                                        204
              4
                                                                 21
                                                                                                                  -
                                                                                        GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                        CTGGTGCTCATCTGCGCCGGC
                                                     LeuValLeuIleCyaAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGAGTGAGGAA 1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluSerGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cy8ProAlaProIleLeuLy8GluValGlyMetLy8AlaAlaLeuGlnValSerMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleAsnAspSerValThrLeuAsnGluLysFroPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TrpPheTrpProLeuCysCysThrValIleIleLysGluValProProProProAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                     1.48e-225
1894.00
100.00%
100.00%
100.00%
98.96%
                                                                                                                                          x US-10-474-794-231 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         364
                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1043
                60
                                        263
                                                                 40
                                                                                          203
                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              923
    .. .. .. .. ..
                                                                RESULT 9
US-10-979-159-176
                                                                                                                         ક
                                                                                                                                                     밁
                                                                                                                                                                      ঠ
                                                                                                                                                                                                밁
                                                                                                                                                                                                                          ક
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                            ક
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
Sequence 176, Application US/10979159
Publication No. US20050142138A1
GENERAL INFORMATION:
APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
                                                                                                                                                                                                         1104
                                                                                                                                                                                                                                                          1044
                                                                                                      1224 GAGAGTGAGGAA 1235
                                                                                                                     361 GluSerGluGlu 364
                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                             984
                                                                                                                                                                                                                                                                                                                                                                                         261
                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       264 GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                     TrpPheTrpProLeuCysCysThrVallleIleLysGluValProProProProAlaGlu
                                                                                                                                                                                                          rccarccreeccarceccrecrearccrerrccrecrecraeccreecrercres
                                                                                                                                                                                                                        SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                                                                                                                                                                                                                                                          GATGGCCTCTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                          AspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                            IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                 ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | IleGluIleLeuAlaAlaGluProSerThrIleCy8AlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                        TGGTTCTGGCCCCTCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                 ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                             1043
                                                                                                                                                         1223
                                                                                                                                                                                                          1163
                                                                                                                                                                                                                                                            1103
                                                                                                                                                                                360
                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                     320
                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                 983
                                                                                                                                                                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                                                                                                                                                                   923
                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                200
```

```
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/10/979,159
CURRENT APPLICATION NUMBER: US/09/918,715
PRIOR FILING DATE: 2001-08-01
PRIOR PILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-02
PRIOR PILING DATE: 2000-08-11
PRIOR PILING DATE: 2000-08-11
PRIOR PILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOFTWARE: FASTSEQ for Windows Version 3.0
ENGTH: 5540
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2 (1-368) x US-10-979-159-176 (1-5540)
                   201
                                                                                  181
                                                                                                                   624
                                                                                                                                                     161
                                                                                                                                                                                    564
                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                                         504
                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                         444
                                                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                            384
                                                                                                                                                                                                                                                                                                                                                                                                                                                             324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   144
                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                        GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
ValAsnAspG1yPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                      LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                       SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                         ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                         CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                            HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                            TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                   SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGCCACGGCGCAGCGGAGAGCCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetAlaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
                                                                                                                                                                                      ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC
                                                                                                                     TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.48e-225
1894.00
100.00%
100.00%
98.96%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                    200
                                                                                                                                                     180
                                                                                                                                                                                      623
                                                                                                                                                                                                                                                         563
                                                                                                                                                                                                                                                                                        140
                                                                                                                                                                                                                                                                                                                         503
                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                            443
                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                             383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                     683
                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                    Query
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
 Ş
                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-979-159-231
                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                         US-10-979-159-231
                                                                                                                                                                                                                                                       ; SOFTWARE: Fast
; SEQ ID NO 231
; LENGTH: 5540
                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo
                                                                                                                                                      No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                        FastSEQ
 {\tt MetAlaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr}
```

S 뭐 á 밁 Ś 밁 δ 밁 5 밁 Ş 밁 á 밁 S В á 밁 Ś 밁 S

```
Sequence 231, Application US/10979159

Publication No. US20050142138A1

GENERAL INFORMATION:
APPLICANT: Brad St. Croix
APPLICANT: Beart Vogelstein
APPLICANT: Kenneth Kinzler
ITILE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/10/979,159
CURRENT FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: US/09/918,715
PRIOR APPLICATION NUMBER: 00/222,599
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-02
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
US-09-970-076-2 (1-368) x US-10-979-159-231 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1224 GÁGÁGTGÁGGAÁ 1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluSerGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACCACCACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TEGTTCTEGCCCCTCTGCTGCACTGTGATTATCAAGGAGGTCCCTCCACCCCCTGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TrpPheTrpProLeuCysCysThrValIleIleLysGluValProProProProAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                for Windows Version
                                                    1.48e-225
1894.00
100.00%
100.00%
100.00%
98.96%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            364
                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                             5540
364
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          863
```

61

81

264

41

204

144

21

```
HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
GluSerGluGlu
                                                                                                                              TCCATCCTGGCCATCGCCCTGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                        AspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                               CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                                                                                                                                                                                                                                                      IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                               ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IleGluIleLeuAlaAlaGluProSerThrIleCyaAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LygAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLygAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerGluargGlualaasnargSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGTGCTCATCTGCGCCGGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyAglyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGCCACGGCGGAGCGGAGAGCCCTCGGCATCGGCTTCCAGTGGCTCTCTTTTGGCCACT
                                                                              TrpPheTrpProLeuCysCysThrVallleIleLysGluValProProProProAlaGlu
                                                                                                                                                   SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGAACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                              TGTCCAGCGCCTATCTTAAAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAAC
                                                                                                                                                                                                                                                                                                                                                     ATCAATGACTCGGTCACACTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                       ICTCTTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                            1043
                                                                                                                              1163
                                                                                                                                                                                                     1103
                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                       1223
                                                                                                                                                                                                                                                                                                                                                     983
                                                                                                                                                                                                                                                                                                                                                                                       280
                                                                                                                                                                                                                                                                                                                                                                                                                            923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Young, John A.T.

APPLICANT: Bradley, Kenneth A.

APPLICANT: Bradley, Kenneth J.

APPLICANT: Collier, Robert J.

APPLICANT: Mogridge, Jeremy S.

TITLE OF INVENTION: Anthrax Toxin Receptor FILE REFERENCE: 960296.97745

CURRENT APPLICATION NUMBER: US/11/047,278

CURRENT FILING DATE: 2005-01-31

PRIOR APPLICATION NUMBER: US/9/970,076

PRIOR PILING DATE: 2001-10-03

PRIOR APPLICATION NUMBER: 60/251,481

PRIOR PILING DATE: 2001-12-05

NUMBER OF SEQ ID NOS: 10

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 5

LENGTH: 5540

TYPE: DNA

ORGANISM: Homo sapiens

PEATURE:

NAME/KEY: CDS

LOCATION: [144]..(1835)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-11-047-278-5

J. Sequence 5, Application US/11047278

Publication No. US20050196407A1

GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                밁
                                                                 S
                                                                                                           밁
                                                                                                                                      S
                                                                                                                                                                                片
                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2 (1-368) x US-11-047-278-5 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-11-047-278-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1224 GAGAGTGAGGAA 1235
 161
                                    564
                                                                     141
                                                                                                                                               121
                                                                                                                                                                                    444
                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                           384
                                                                                                                                                                                                                                                                                                                                    324
                                                                                                                                                                                                                                                                                                                                                                                                          264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            144
                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                41 GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \vdash
SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                         ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                           HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                  GlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                           TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                    GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                       GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                          GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCACGGCGAGCGGAGAGCCCCTCGGCATCGGCTTCCAGTGGCCTCTTTGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MetAlaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
                                      ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.48e-225
1894.00
100.00%
100.00%
100.00%
98.96%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      364
0
0
   180
                                                                                                                                                                                                                                                             443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                    623
                                                                        160
                                                                                                               563
                                                                                                                                                 140
                                                                                                                                                                                    503
                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                               100
                                                                                                                                                                                                                                                                                                                                    383
                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                            323
                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
```

ş 밁 र् 문 Ş 밁 á 밁 ঠ 밁 δ 밁 र् 뭐 5 밁 ş 밁 8 밁 á 밁 S 밁 ঠ 밁 5 밁 5 B ঠ 맑 á 밁 ş 밁

361

1164

1104

1044 321

GATGGCCT

301

```
Sequence 186, Application US/09918715

| Sequence 186, Application US/09918715
| Publication No. US20030017157A1
| GENERAL INFORMATION:
| APPLICANT: Brad St. Croix
| APPLICANT: Brad St. Croix
| APPLICANT: Kenneth Kinzler
| TITLE OF INVENTION: ENDOPHELIAL CELL EXPRESSION PATTERNS
| FILE REFERENCE: 1107.00134
| CURRENT APPLICATION NUMBER: US/09/918,715
| CURRENT FILING DATE: 2001-08-01
| PRIOR APPLICATION NUMBER: 60/222,599
| PRIOR APPLICATION NUMBER: 60/224,360
| PRIOR APPLICATION NUMBER: 60/224,360
| PRIOR FILING DATE: 2000-08-02
| PRIOR FILING DATE: 2000-08-11
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR FILING DATE: 2000-04-11
                                                                                                                                                                                                                                                                                                                                                                   RESULT 12
US-09-918-715-186
; Sequence 186, Ap;
; Publication No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
 Percent Similarity:
                                         Alignment Scores:
                                                                     ; ORGANISM: Mus
US-09-918-715-186
                                                                                              NUMBER OF SEQ ID NOS: 358
SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 186
LENGTH: 5220
TYPE: DNA
                           No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAGTGAGGAA 1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GluSerGluGlu 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TrpPheTrpProLeuCysCysThrValIleIleLysGluValProProProProAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCATCCTGGCCATCGCCGCTGATCCTGTTCCTGCTCCTAGCCCTGGCTCTCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuAlaLeuTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGGCCTCTCTTTATCTCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCAATGACTCGGTCACACTCAATGAGAAGCCCCTTTTCTGTGGAAGATACTTATTTACTG
                                                                                  musculus
6.5e-213
1793.00
97.75%
Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity: Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           გ
                                                     밁
                                                                                 Ś
                                                                                                              문
                                                                                                                                    S
                                                                                                                                                                      밁
                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                            F
                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2 (1-368) x US-09-918-715-186 (1-5220)
                                                                                                                                                                                                                              1012
                                                                                                                                                                       1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                592
                                                                                                                                                                                                                                                          249
                                                                                                                                                                                                                                                                                                                                               892
                                                                                                                                                                                                                                                                                                                                                                       209
                                                                                                                                                                                                                                                                                                                                                                                                                                                            772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     412
                                                                                                                                                                                                                                                                                                                                                                                                                               189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                             GlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGluPro
                                                                                                                                                                                                                                                                                                                                                                                                                  AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThrLeuValLeuIleCysAlaGlyGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGCAGATTTACTATGAGAACAGTCAAGGATACAGGACGGCGAGCGTCATCATCGCGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGGGCCGCCGAGGATGGGGGACCAGCTTGCTACGGAGGATTCGACCTCTACTTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGGTGCGGGCCTGCGGGACTCTGCGTGCTGCACTCGTGCTCGTGTGCGCCGGACAC
                                                                                                                                                                         GAGAAGCCCTTTGCTGTGGAAGACACTTATTTGCTGTGCCCAGCACCAATCTTGAAAGAA
                                                                                                                                                                                                                                                                                    SerThrIleCysAlaGlyGluSerPheGlnValValArgGlyAsnGlyPheArgHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAspArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGACAACTTTAATGAAACTAACTGAGGACAGGGAACAGATCCGACAAGGCCTAGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleLeuPheLeuLeuLeuAlaLeuAlaLeuCygTrpPheTrpProLeuCygCygThr
                                                         TCTGTCATCACCACCACACACTGTTCAGACGGCTCCATCCTGGCGATTGCTCTGCTG
                                                                        SerValIleIleThrThrThrHisCysSerAspGlySerIleLeuAlaIleAlaLeuLeu
                                                                                                               GTTGGCATGAAAGCTGCACTGCAGGTCAGCATGAACGACGGCCTGTCCTTCATCTCCAGT
                                                                                                                                ValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSerSer
                                                                                                                                                                                     GluLygProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLysGlu
                                                                                                                                                                                                                               GCCCGCAATGTGGACAGGGTCCTCTGCAGCTTCAAAATCAATGACTCAGTCACGCTCAAT
                                                                                                                                                                                                                                                 AlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeuAsn
                                                                                                                                                                                                                                                                                                                                            CAAGGCATTATCCACTCAATTTTAAAGAAATCCTGCATCGAAATTCTGGCGGCTGAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAGACCTTGGTGCGATTGTTTACTGCGTTGGCGTGAAGGATTTCAATGAAACTCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACGGATGGGGAGCTGCACGAGGACCTCTTCTTCTACTCAGAGAGGGGAGGCTAACCGATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCACGAAGGATTCGAGAGGGCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96.07%
93.68%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches:
Indels:
                                348
                                                                                                                  1191
                                                                                                                                                                         1131
                                                                                                                                                                                                                                 1071
                                                                                                                                                                                                                                                                                      1011
                                                                                                                                             308
                                                                                                                                                                                                     288
                                                                                                                                                                                                                                                             268
                                                                                                                                                                                                                                                                                                                   248
                                                                                                                                                                                                                                                                                                                                               951
                                                                                                                                                                                                                                                                                                                                                                          228
                                                                                                                                                                                                                                                                                                                                                                                                      891
                                                                                                                                                                                                                                                                                                                                                                                                                                  208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         48
     1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                            831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    771
```

밁 Ş

```
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/09/918,715
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-02
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOFTWARE: FRASESEQ for Windows Version 3.0
SEQ ID NO 300
LENGTH: 5220
TYPE: DNA
ORGANISM: MOUSE
US-09-918-715-300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
US-09-918-715-300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2 (1-368) x US-09-918-715-300 (1-5220)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 300, Application No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Brad St. Croix APPLICANT: Bert Vogelste APPLICANT: Kenneth Kinzl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     349
                                                                                                                                           592
                                                                                                                                                                                                                                                                                     472
                                                                                                                                                                                                                                                                                                                                                                                                                               352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    292
                                  149
                                                                                                        129
                                                                                                                                                                           109
                                                                                                                                                                                                              532
                                                                                                                                                                                                                                                                                                                                                          412
                                                                                                                                                                                                                                                 89
                                                                                                                                                                                                                                                                                                                        69
                                                                                                                                                                                                                                                                                                                                                                                           49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThrLeuValLeuIleCysAlaGlyGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ValileileLygGluValProProProProAlaGluGluSerGluGlu 364
                                                                                                                                                                                                                                                                                                          LeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThrArg
                                                                                                                                                                                                                                                                                                                                                        GlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPheIle 48
                                                                                            GluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeu
                                                                                                                                                                LeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSer 128
                                                                                                                                                                                                                                                                                                                                                                                LeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                               GGGGGCCGCCGAGGATGGGGGACCAGCTTGCTACGGAGGATTCGACCTCTACTTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGTGCGGGCCTGCGGGACTCTGCGTGCTGCTCGTGCTGCGCCCGGACAC 35:
                      ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSer 168
                                                                                                                                           CTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCACGAAGGATTCGAGAGGGCCAGT
                                                                                                                                                                                                                 GGGACAACTTTAATGAAACTAACTGAGGACAGGGAACAGATCCGACAAGGCCTAGAAGAG
                                                                                                                                                                                                                                    GlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGlu 108
                                                                                                                                                                                                                                                                                     TTGGCTCATAGATTCATCAGCCCACAGCTAAGGATGTCCTTCATTGTCTTCTCTACTCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/09918715
o. US20030017157A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6.5e-213
1793.00
97.75%
96.07%
93.68%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                           651
                                                                                                                                                                                                                 591
                                                                                                                                                                                                                                                                                                                        88
                                                                                                                                                                                                                                                                                                                                                                                           89
                                                                                                                                                                                                                                                                                     531
                                                                                                                                                                                                                                                                                                                                                           471
                                                                                                                                                                                                                                                                                                                                                                                                                               411
                                                                                                                                                     GENERAL INFORMATION:

APPLICANT: Carson-Walter, Eleanox
APPLICANT: St. Croix, Brad
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107.00179
FULE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
INUMBER OF SEG ID NOS: 359
PRIOR FILING DATE: 2001-08-01
INUMBER OF SEG ID NOS: 359
PRIOR FILING DATE: 2001-08-01
INUMBER: FABTSEQ for Windows Version 4.0
SEG ID NO 186
LENGTH: 5220
TYPE: DNA
MUS MUS MUSCULUS
 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
US-10-474-794-186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                     Score:
                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      日
                                                                                                                                           US-10-474-794-186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 186, Appublication No.
                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              349 ValileIleLysGluValProProProProAlaGluGluSerGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGATCATCAAGGAGGTCCCTCCACCCCCTGTTGAGGAGAGTGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleLeuPheLeuLeuLeuAlaLeuAlaLeuTrpTrpPheTrpProLeuCysCysThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerVallleIleThrThrHisCysSerAspGlySerIleLeuAlaIleAlaLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTGGCATGAAAGCTGCACTGCAGGTCAGCATGAACGACGGCCTGTCCTTCATCTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLysGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerThrIleCysAlaGlyGluSerPheGlnValValArgGlyAsnGlyPheArgHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGluPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAAGCCCTTTGCTGGAAGACACTTATTTGCTGTGCCCAGCACCAATCTTGAAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAGGCATTATCCACTCAATTTTAAAGAAATCCTGCATCGAAATTCTGGCGGCTGAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTCGGATTGCAGACAGTAAGGACCACGTGTTTCCTGTGAACGACGGCTTCCAGGCTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGAGACCTTGGTGCGATTGTTTACTGCGTTGGCGTGAAGGATTTCAATGAAACTCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/10474794
o. US20040213793A1
6.5e-213
1793.00
97.75%
96.07%
93.68%
8
                  Length:
Matches:
Conservative:
Mismatches:
Indels:
   5220
342
6
8
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    891
```

ö

Ś

맑

ঠ 밁 ঠ 밁 ર્ 밁 र् 밁 á 밁 Ś 밁 გ

밁

```
US-09-970-076-2 (1-368) x US-10-474-794-186 (1-5220)
   1312
                                                                                                                                           1192
                                                                                                                                                                                                               1132
                                                                                                                                                                                                                                                                                     1072
                                                                                                                                                                                                                                                                                                                                                           1012
                                                                     1252
                                  349
                                                                                                                                                                                                                                                                                                                       269
                                                                                                                                                                                                                                                                                                                                                                                                                               952
                                                                                                                                                                                                                                                                                                                                                                                                                                                               229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     v
                                                                                                                                                                                                               SerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArgHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vall1eI1eLysGluValProProProProAlaGluGluSerGluGlu
                                                                       SerValIleIleThrThrHisCysSerAspGlySerIleLeuAlaIleAlaLeuLeu
                                                                                                                                                                                                                                                                                    GAGAAGCCCTTTGCTGGAAGACACTTATTTGCTGTGCCCAGCACCAATCTTGAAAGAA
                                                                                                                                                                                                                                                                                                        GluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLysGlu
                                                                                                                                                                                                                                                                                                                                                                              AlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGluPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTCGGATTGCAGACAGTAAGGACCACGTGTTTCCTGTGAACGACGGCTTCCAGGCTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAGACCTTGGTGCGATTGTTTACTGCGTTGGCGTGAAGGATTTCAATGAAACTCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGCAGATTTACTATGAGAACAGTCAAGGATACAGGACGGCGAGCGTCATCATCGCGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGACAAGTCAGGAAGTGTGCTGCACCACTGGAATGAAATCTACTACTTCGTGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGGGCCGCCGCGAGGATGGGGGGACCAGCTTGCTACGGAGGATTCGACCTCTACTTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGTGCGGGCCTGCGGGACTCTGCGTGCTGCTCGTGTGCGCCCGGACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThrLeuValLeuIleCy8AlaGlyGln
   GTGATCATCAAGGAGGTCCCTCCACCCCCTGTTGAGGAGAGTGAGGAA
                                                                                            IleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrpTrpPheTrpProLeuCysCysThr
                                                                                                                                           TCTGTCATCATCACCACACACACTGTTCAGACGGCTCCATCCTGGCGATTGCTCTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                               TCCACCATCTGCGCGGGAGAGTCCTTTCAAGTGGTCGTAAGAGGAAATGGCTTCCGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAAGGCATTATCCACTCAATTTTAAAGAAATCCTGCATCGAAATTCTGGCGGCTGAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACGGATGGGGAGCTGCACGAGGACCTCTTCTTCTACTCAGAGAGGGGAGGCTAACCGATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGACAACTTTAATGAAACTAACTGAGGACAGGGAACAGATCCGACAAGGCCTAGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGCTCATAGATTCATCAGCCCACAGCTAAGGATGTCCTTCATTGTCTTCTCTACTCGA
 1359
                                  364
                                                                       1311
                                                                                                                                           1251
                                                                                                                                                                                                                                                                                     1131
                                                                                                                                                                                                                                                                                                                                                           1071
                                                                                                                                                                                                                                                                                                                                                                                                                               1011
                                                                                                                                                                                                                                                  308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                411
                                                                                                                                                                              328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 300, Application US/10474794

Publication No. US20040213793A1

GENERAL INFORMATION:
APPLICANT: Carson-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 300
LENGTH: 5220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 15
US-10-474-794-300
                               å
                                                          Ş
                                                                                                       밁
                                                                                                                                Ş
                                                                                                                                                                             밁
                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Mouse US-10-474-794-300
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2 (1-368) x US-10-474-794-300 (1-5220)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       352
                                                                                                                                                                              652
                                                                                                                                                                                                               129
                                                                                                                                                                                                                                                                                     109
                                                                                                                                                                                                                                                                                                                        532
                                                                                                                                                                                                                                                                                                                                                                                              472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            292
 189
                                                                                                                                          149
                                                                                                                                                                                                                                                                                                                                                          89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       49 LeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                              69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29 GlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeu
                                                                                                                                                                                                                                                                       LeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGGGCCGCCGAGGATGGGGGACCAGCTTGCTACGGAGGATTCGACCTCTACTTCATC
 AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                              GlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACAAGTCAGGAAGTGTGCTGCACCACTGGAATGAAATCTACTTCGTGGAGCAG
                                                         ArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGlnLeu
                                                                                                                             ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSer
                                                                                                                                                                              GAGCAGATTTACTATGAGAACAGTCAAGGATACAGGACGGCGAGCGTCATCATCGCGTTG
                                                                                                                                                                                                                                                    CTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCACGAAGGATTCGAGAGGGCCAGT
                                                                                                                                                                                                                                                                                                                        GGGACAACTTTAATGAAACTAACTGAGGACAGGGAACAGATCCGACAAGGCCTAGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                              TTGGCTCATAGATTCATCAGCCCACAGCTAAGGATGTCCTTCATTGTCTTCTCTACTCGA
                                                                                                                                                                                                                                                                                                                                                                                                                 LeuAlaHisLygPheIleSerProGlnLeuArgMetSerPheIleValPheSerThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6.5e-213
1793.00
97.75%
96.07%
93.68%
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5220
342
6
8
0
```

δ 밁

유 S 밁 Ś 밁 5 밁 5 8 ঠ 밁 Ş 밁

188

208 831 168

771

148

128

651

301 531

591

471 89 411 48 351 28

88

밁 Ś 묽 S 밁 S

δ

5 밁

밁

á 밁 S

δ 밁 S 밁 S 밁 Ş

밁

중 음

 8
 8
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9
 9

Search completed: December 19, 2005, 02:09:34 Job time : 1230.98  $\mbox{secs}$ 



```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2 1/USPTO_spool/US09970076/runat_14122005_111853_21065/app_query.fasta_1.2410
-DB=PublTshed_Applications_NA_New -QFMT=fastap -\(\bar{SUFFIX=}\)runbn -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cd1 -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=20000000000 -USER=US09700076 @CGN 1 1 675 @runat_14122005_111853_21065
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPEOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Run on:
                                                                                                                                                                                            No.
                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                     131
122
113.5
113.5
                                                                                                                            1894
145.5
                                                                                                                                                                                          Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Xgapop 10.0 , 1
Ygapop 10.0 , 1
Fgapop 6.0 , 1
Delop 6.0 , 1
                                                                                                                                                                                        Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Published_Applications_NA_New:*
1: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
2: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               December 18, 2005, 07:41:36; Search time 296.957 Seconds (without alignments)
                                                                                                                                                                                                                  Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4161431 segs, 245089505 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MATAERRALGIGFQWLSLAT......VIIKEVPPPPAEESEENKIK 368
    US-09-970-076-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                     cgn2_6/ptodata/1/pubpna/uso8_NEW_PUB.seq:*
cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*
    5540
4740
11447
2834
1325
1325
2501
3449
3564
                                                                                                                                                                                                                                                                                                                                                                                                 _6/ptodata/1/pubpna/US11_NEW_PUB.seq:*
_6/ptodata/1/pubpna/US11_NEW_PUB.seq2:*
_6/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
                                                                                                                                                                                                                                                                                                                                                                              _6/ptodata/1/pubpna/US60_NEW_PUB.seq:+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Xgapext
Ygapext
Fgapext
Delext
      66666777
US-11-186-284-198

US-11-080-026-3

US-11-186-284-25

US-10-750-185-39040

US-10-750-185-56394

US-10-750-185-56394

US-10-131-826A-293

US-10-601-368-20
                                                                                                                                                                                          Ħ
                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7.05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           607.449 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8322862
Sequence 198, Appli
Sequence 3, Appli
Sequence 25, Appli
Sequence 39040, A
Sequence 56394, A
Sequence 182, App
Sequence 293, Appl
                                                                                                                                                                                          Description
```

ALIGNMENTS

O	n	იი ი ი	)
444 544 544 544 544	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11 C C C C C C C C C C C C C C C C C C	10 11 12 13 14 16
79.5 79.5 78.5 78.5 78	0 0 0 0 0		111 107.5 107.5 107.5 107.5 107 107 107
			, , , , , , , , , , , , , , , , , , ,
5576 5808 1895 118996 11329 1443	2538 3989 1688 11115 11115 3586 1413 2317 2987 3366	47572 2773 3884 1062 1347 1881 1881 3144 3189 2715 1705	31458 31458 3464 3564 3967 3967 3968 3968
001000	00007700007	00010011010	0007700000
-561-51 -561-51 -185-42 -086-84 -657-32	-11-147-047-20 -10-750-185-474 -10-510-386-157 -10-513-786-6 -10-513-786-8 -11-080-991-51 -11-055-82-411 -10-793-626-435 -10-793-626-339 -10-793-626-339	0-995-561-1 0-995-561-3 10-102-240-3 10-601-368-1 11-137-465-1 11-137-465-1 10-467-657-5 11-137-465-1 10-507-275-4 10-507-275-1	-10-601-368-19 -10-995-561-464 -10-995-561-465 -10-995-561-465 -10-601-368-2 -11-000-463-102 -11-000-463-102 -10-601-368-1 -10-995-561-404
516, A 517, A 42451, 84, Ag 3293, 3293,	20, App 147454, 157, App 6, Appl 8, Appl 51, App 411, App 4357, A 3398, A	3356 3, App 7, App 1, App 1, App 2, App 2, App 0, App 0, App 0186, A	19, App 464, Ap 465, Ap 466, Ap 2, Appl 2, Appl 102, Ap 102, Ap 104, Appl

US-11-186-284-198

(Sequence 199, Application US/11186284

Publication No. US20050266493A1

(Publication No. US20050266493A1

(Publication No. US20050266493A1

(Publicant: Milennium Pharmaceuticals, Inc.

APPLICANT: Milennium Pharmaceuticals, Inc.

APPLICANT: Guillemette, Tracy L.

APPLICANT: Schlegel, Robert

APPLICANT: Schlegel, Robert

APPLICANT: Monahan, John E.

APPLICANT: Monahan, John E.

APPLICANT: Monahan, John E.

APPLICANT: Monahan, John E.

APPLICANT: Monahan, John E.

APPLICANT: Monahan, John E.

APPLICANT: Monahan, John E.

APPLICANT: Monahan, John E.

APPLICANT: MONAHAN, Stephen N.

APPLICANT: MONAHAN, SCHOPOSITIONS, KITS, AND

TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT,

TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT,

TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT,

TITLE OF INVENTION: MUMBER: US/11/186,284

CURRENT FILING DATE: 2005-07-21

PRIOR APPLICATION NUMBER: US/10/301,822

PRIOR APPLICATION NUMBER: US/0/339,971

PRIOR APPLICATION NUMBER: US 60/339,971

PRIOR APPLICATION NUMBER: US 60/361,978

PRIOR APPLICATION NUMBER: US 60/361,978

PRIOR APPLICATION NUMBER: US 60/361,978

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 60/381,988

PRIOR APPLICATION NUMBER: US 6

PREVENTION, AND

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (144)...
US-11-186-284-198
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores: Pred. No.: Score:
S
                          밁
                                                S
                                                                             밁
                                                                                                 S
                                                                                                                            닭
                                                                                                                                                     Ş
                                                                                                                                                                                   밁
                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2 (1-368) x US-11-186-284-198 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM:
                                                                                                                                                                                                                                       684
                                                                                                                                                                                                                                                                                            624
                                                                                                                                                                                                                                                                                                                                                564
                                                                                                                                                                                                                                                                                                                                                                                                   504
                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       144 ATGGCCACGGGGGGGGGGGGGCCTCGGCATCGGCTTCCAGTGGCTCTCTTTGGCCACT
                           924
                                                 261
                                                                             864
                                                                                                       241
                                                                                                                                 804
                                                                                                                                                          221
                                                                                                                                                                                    744
                                                                                                                                                                                                             201
                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                                                                                        444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 264
 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     204 CTGGTGCTCATCTGCGCCGGGCAAGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 _
                                                                                                                                                IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                                               ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetAlaThrAlaGluArgArgAlaLeuGlyIleGlyPheGlnTrpLeuSerLeuAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                             ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                   ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                         LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                            SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                     CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                 HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuValLeuIleCysAlaGlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyr
{\tt CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn}
                                            IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                      GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                         AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                             TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                GTGAGAGGAAACGGCTTCCGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAG
                                                                                                                                   ATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (1838)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.27e-218
1894.00
100.00%
100.00%
98.96%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5540
364
0
0
                                                                                                                                                                                      803
                                                                                                                                                                                                                                         743
                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                          160
                                                                                                                                                                                                                                                                                                                                                                                                     563
                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                                                                                        503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          203
                                                                                923
                                                                                                       260
                                                                                                                                 863
                                                                                                                                                           240
                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                  200
                                                                                                                                                                                                                                                                                            683
                                                                                                                                                                                                                                                                                                                                                623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
```

```
TITLE OF INVENTION: MODIFIED POLYPEPTIDES STY
TITLE OF INVENTION: DESIRED CONFORMATION AND
FILE REFERENCE: CEPF-PO2-021
CURRENT APPLICATION NUMBER: US/11/080,026
CURRENT FILING DATE: 2005-03-15
PRIOR APPLICATION NUMBER: 09/945,265
PRIOR FILING DATE: 2001-08-31
PRIOR PILING DATE: 2001-08-31
PRIOR PILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FRASESEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 4740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 2
US-11-080-026-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
              Ş
                                          닭
                                                                         Ş
                                                                                                        밁
                                                                                                                           Ş
                                                                                                                                                          밁
                                                                                                                                                                                  Ś
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                            Query
                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores Pred. No.:
                                                                                                                                                                                                                                                                     US-09-970-076-2 (1-368)
                                                                                                                                                                                                                                                                                                                                                                                                         US-11-080-026-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3, Application US/11080026
Publication No. US20050260192A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Springer, Timothy APPLICANT: Shimaoka, Motomu APPLICANT: Lu, Chafen
                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                  520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    984
730
                      111 LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln 130
                                                    670
                                                                                                                                                             580 AAGGAGTTTGTCTCAACT
                                                                                                                          63 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                  44 AspLeuTyrPheIleLeuAspLysSerGlySerValLeu---HisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GluSerGluGlu 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeuLeuAlaLeuAlaLeuLeuTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrThtHisCysSerAspGly 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TrpPheTrpProLeuCysCysThrValIleIleLysGluValProProProProPoAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCTGCTT-----GGGCGGACACACACGGCCACGGGCATCCGCAAAGTGGTACGAGAG
                                                     TTTACCTTCAAAGAGTTCCAGAACAACCCTAACCCAÁGATCACTGGTGAAGCCAATAACG
                                                                                                                                                                                                                 GACATTGCCTTCTTGATTGGCTCTGGTAGCATCATCCCACATGACTTTCCGCCGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                   5.69e-06
145.50
45.85%
26.20%
7.60%
                                                                                                                                                                                                                                                                     x US-11-080-026-3 (1-4740)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P
                                                                              -ArgGluGlnIleArgGlnGlyLeuGluGluLeuGln
                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                         TTGATGCAGTACTCTGAAGAATTCCGGATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STABILIZED IN
AND METHODS FO
                                                                                                                                                              -GTGATGGAGĆÁÁŤŤÁAAAAAGŤĆĆAAA 624
                                                                                                                                                                                                                                                                                                4740
60
45
81
43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IN A
FOR PRODUCING SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1043
                                                                                110
                                                                                                          669
                                                                                                                                                                                         82
                                                                                                                                                                                                                    579
                                                                                                                                                                                                                                             62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1103
                                                                                                                                    96
    783
```

```
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, ANI
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSN
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPMO1-029P2NM
CURRENT APPLICATION UNMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
PRIOR APPLICATION NUMBER: US/0301,822
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2001-12-10
PRIOR PRILING DATE: 2001-05-05
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-05-05
PRIOR APPLICATION NUMBER: US 60/381,988
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                            ; ORGANISM: Homo Sapiens FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(9192)
US-11-186-284-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 3
US-11-186-284-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                       SOFTWARE: PASTSEQ
SEQ ID NO 25
LENGTH: 11447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 25, Application US/11186284 Publication No. US20050266493A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Millennium Pharmaceuticals,
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Thibodeau, Stephen N.
                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 228
                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE:
                                                                                                                                                                                                                         TYPE: DNA
                                                                           .
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1120 ATGTCTCAGGAAGGCTTCAGCGCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             955 AAATCCCGCCAAGAGCTTAATACCATCGCATCCAAGCCGCCTCGTGATCACGTGTTCCAG 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ValArgGlyAsnGlyPheArgHisAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAATAAC---TTTGAGGCTCTGAAGACCATTCAGAACCAGCTTCGGGAGAAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuAlaArg------IleAlaAspSer----LysAspHisValPhePro 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGTTTAACATCACCAACGGAGCCCGAAAGAATGCCTTTAAGATCCTAGTTGTCATCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IleGluIleLeuAlaAlaGluProSerThrIleCyaAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAG-----GGAGTCATTCGCTACGTCATTGGGGTGGGAGATGCCTTCCGCAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeuThr 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -ATCTTTGCGATCGAGGGTACTCAGACAGGAAGTAGCAGCTCCTTTGAGCATGAG 1119
                                                                                                                                                                                                                                                                                for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                    2002-05-20
0.00135
131.00
43.11%
21.56%
6.84%
Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ASSESSMENT,
11447
72
72
72
118
72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PREVENTION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
   RESULT
                                      밁
                                                                     Ś
                                                                                                              밁
                                                                                                                                        S
                                                                                                                                                                                    밁
                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2 (1-368) x US-11-186-284-25 (1-11447)
                                      1300
                                                                                                                                                                                                                                                                                                                                                                                                                1051
                                                                                                                                                 301
                                                                                                                                                                                                                         281
                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 931 GAGATCATCTCCCAGGTGTGCTCAGGAGTTGATGAGCAGCTTGGTGAATTGGTTAGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   814 TTCTCCTTGGGCATTAAAGCTGCAGATGCAAAAGAACTCAAAACAAATTGCCTCCACACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     44
                                      GGT-----GTGGATATAAAAGCCGATATTGTGTTTTTGGTT 1335
                                                                                                                                                                                                                                                              --- CCTCAGACAACCACGCTCAGTGTTCGCGACCTCTCAGCAGACACGGAGTAC----
                                                                                                                                                                                                                                                                                               IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu 280
                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTAAATTGGAATCCATCTCCTAGTCCAGTGACTGGCTACAAAGTCATCCTCACACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ArgGlyAsn-----GlyPheArg---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glu-----ProSerThrIleCysAlaGlyGluSerPheGlnValValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerIleLeuLysLysSerCysIle------GluIleLeuAlaAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrCysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGTG-----GAAATTCCAGCAAGAGAGCTTCGTAATGTTGGAGTTGAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAGTTGGCTTTCCTAAAGTGGCAATTATTATT----ACGGATGGAAAATCCCAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGACAGGGGATGCCATTGATTATTTAGTTAAAAATACTTTCACGGAATCTGCTGGGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu-----Asp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrTyrPheValGluGlnLeuAlaHisLysPheIle----SerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATTTGGTTTTCCTCGTGGATGGCTCTTGGAGTGTGGGGAAGAAATAATTTCAAGTACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                         GlySerIleLeuAlaIleAlaLeuLeuIleLeuPheLeuLeu 333
                                                                                                                GAACCCATTTCAATAATGGAGAAGACTCAGCCAATGAAAGTTCAAGTGGAATGTTCACGT 1299
                                                                                                                                               AspGlyLeuSerPheIle---SerSerSerValIleIleThrThrThrHisCysSerAsp 319
                                                                                                                                                                                                                                                                                                                                        ATGACTGCAGGAAGCCGACACGCTCTGAGTGTGGGG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGAAGTTGTTGAGCCTCCTTCAAATTTGATTGCCATGGAAGTCTCTTCAAAATATGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCACTGAACCATGTTTTCAATGTGGCCAAC---TTTGATGCAATTGTGGATATTCAGAAT 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAGTTGTTCAATACAGCTCTGACACCAGGACTGAATTTAACTTAAATCAGTACTACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTAGACTTCATTGCTGCTCTTGTGTCTTTTGACATTGGGGAAGAGAGACAAGAGTT
                                                                                                                                                                                                                       CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                                                                                                                                                                                                                                                         AGGGATGAACTTCTTGCTGCAATAAAAAAAATTCCA----TATAAAGGTGGCAACACA
                                                                                                                                                                                      -cagatcagtgtttccgccatgaagggaatgacatccagt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . 990
                                                                                                                                                                                                                                                                1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62
                                                                                                                                                                                                                                                                                                                                                                                                                                                       247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          193
```

```
FILE REFERENCE: MMI1100-2
CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR FILING DATE: 2002-12-31
NUMBER OF SEQ ID NOS: 64922
SOFTWARE: PATENTIN VERSION 3.1
SEQ ID NO 39040
LENGTH: 2834
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-750-185-39040/c
                                                            밁
                                                                                                   ઇ
                                                                                                                                                밁
                                                                                                                                                                                      ş
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2 (1-368) x US-10-750-185-39040 (1-2834)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; ORGANISM: Bovine US-10-750-185-39040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 39040, Application US/10750185 Publication No. US20050260603A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: MMI GENOMICS, INC.
APPLICANT: DENISE, Sue K.
APPLICANT: KERR, Richard
APPLICANT: ROSENFELD, David
APPLICANT: HOLM, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: BATES, Stephen
APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Мо
::
                                                            1672
                                                                                                                                                  1727
                                                                                                                                                                                                                                      1775
                                                                                                                                                                                                                                                                                                                                                                                                               1890
                                                                                                                                                                                                                                                                                                                              1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2115 GACATTTACTTCCTTATTGACGGGTCTGGCAGTACC-----CACCAAGACGACTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1944 CACTCCAGTGTGGCAGGGCTTGGAGGTAGCCGTTGACAGCATCCAGCAG-----AAGGG 1891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2061 GCGATGAAGGTGTTCATGAATGAGGTGATAAAGATGTTCCACGTTGGACCGGAC---AGA
                                                                                                                                                                                           175
                    215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 ---IleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerProGlnLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          44 AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu-----
                                                                                                                                                                             TYrCysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLy
                  eLeuLysLysSerCys 220
                                                                                                                                                                                                                                      CCCGGTG-----GCTGATGCTGCAGAGGCGCTGAGGGGGCCATGGAGTCACCAT 1728
                                                                                                                                                                                                                                                                            uAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleVa 175
                                                                                                                                                                                                                                                                                                                         TGCTCGCAGCAA-CGTGCCTT-GGTATCTCATTTGTTGTCACTGACGGCCAATCTATGGA 1776
                                                                                                                                                                                                                                                                                                                                                         nArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                   yGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAs 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gGluGlnIleArgGlnGlyLeuGlu------GluLeuGlnLysValLeuProGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MetSerPheIleVal-PheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspAr
                                                                                                     sAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIl 215
                                                                                                                                                  TTATGCAGTTGGAGTCAGAGATGCTAATATTGCTGAGCTTCAAGAGATTGCTGAA-----
                                                                                                                                                                                                                                                                                                                                                                                                               AGGGGGCACCAAGATGGGTGAGGCCCTG---GGCAGCATGATCCAGGTCTTTGCAGACTC 1834
                                                            -GACAGAATGTTTTTCGTGCATGAT---TTTGAGTCCTTGAAGACCATCCAACAAGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19866880867914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.00178
122.00
50.00%
29.03%
6.37%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                115
                                                                                                                                                  1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
US-10-750-185-56394
                               S
                                                                               멼
                                                                                                                         S
                                                                                                                                                                       밁
                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-750-185-56394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 56394
LENGTH: 1325
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: MMI GENOMICS, APPLICANT: DENISE, Sue la APPLICANT: KERR, Richar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIN version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1616 GGTACAAGACATCTGT 1601
                                                                                                                                                                                                                                                                                                                                                  687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     456
906 CAGGTGGACTTCÀÀCACGCTGAAGGCCATTGGGAGCGAGCCCCACGAGGACCACGTCTTC
                                                                                   846 GCCGAGGTGGCCGCAAAAGCCCCGGGACACAGGCATCCTGATCTTTGCCATCGGTGTGGGC
                                                                                                                                                                                               142 AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer
|||||||::: :::||||||||||
                                                                                                                                                                                                                                                            741 ---GCCCTGAACATCGCCTTCTCGGAAGCAGAGGGGGCCCCGGCCCCTGAGGGAGAATGTG
                                                                                                                                                                                                                                                                                                                                                                                         107 GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                      627 GTCAAGAACGAGTTCTCCCTCAAGACCTTCAAGAGGAAGTCCGAGGTGGAGCGTGCCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         576 GACATTGGCCCTGACGTCACCCGTGTGGGGTCTGCTCCAGTAT-----GGCAGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity:
                                      181 ---LyaAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73 PheileSerProGlnLeu---ArgMetSerPheileValPheSerThrArgGlyThrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     55 Val---LeuHisHisTrpAsnGluIleTyrTyrPhe---ValGluGlnLeuAlaHisLys
                                                                                                                                                                                                                                                                                                     AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Leu------MetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAGCGCCTGTGAGAACAAGCGAGCGGACGTGGTCTTTATCATTGACAGCTCACGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlyProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySer
                                                                                                                                                                       CCTCGGGTCATAATGATCGTGACTGATGGGAGGCCCCAGGACTCGGTG------
                                                                                                                                                                                                                                                                                                                                                  AAGAGGATGCGGCATCTGTCCACGGGCACCATGACGGGGCTGGCCATCCAGTAC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCAACACCCACGACTACGCAAAGGTCAAGGAGTTCATTGTGGACATCCTGCAGTTCTTG
                                                                                                                         GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DeNISE, Sue K. KERR, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19866880505724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.00568
113.50
42.63%
23.11%
5.93%
```

965

797 141

845

```
US-09-970-076-2 (1-368) x US-10-750-185-56394 (1-1325)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 56394, Application US/10750185 Publication No. US20050260603A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: ROSENFELD, David
APPLICANT: HOLM, Tom
APPLICANT: BATES, Stephen
APPLICANT: BATES, Stephen
APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
FILE REFERENCE: MMI1100-2
CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR PILING DATE: 2003-12-31
NUMBER: OF SEQ ID NOS: 64922
                                                                                                    Matches:
Conservative:
Mismatches:
                                                                              Indels:
                                                   1325
58
49
93
51
```

180

996

260

924

220 942 240

280

891

1116

162

1176

1236

```
CURRENT APPLICATION NUMBER: US/10/821/234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR FILING DATE: 2003-04-07
NUMBER OF SEO ID NOS: 1704
SOFTWARE: pt_SEO_genes Version 1.0
SEQ ID NO 182
LENGTH: 2501
TYPE: DDN 182
ORGANISM: Homo sapiens
US-10-821-234-182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
                               ð
                                                                             밁
                                                                                                             ş
                                                                                                                                                                                        S
                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 6
US-10-821-234-182/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
   문
                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2 (1-368) x US-10-821-234-182 (1-2501)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 182,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Labat, Ivan
APPLICANT: Stache-Cra
APPLICANT: Andarmani,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: 821A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Tang, Y. Tom
TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Х
О
::
     1337
                                                                             1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1023
                                                                                                                                                        1451
                                                                                                                                                                                                                                                                                                                                                                                      1631 GAAGGAGTCGATGCTGAGGATGGGCACGGCCCAGGGGAACAACAGAAGCGGAAGATCGTC
                                                                                                                                                                                                                                                                                                           1571 CTGGACCCTTCAGGCTCCATGAACATCTACCTGGTGCTAGATGGATCAGACAGCATTGGG 1512
                                       108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                       56
                                                                                                                                                                                                                                                                                                                                                 39
                                                                                                                                                                                                                                                                                                                                                                                                                            28
                                                                                                                                                                                                                                                                                                                                                                                                                        GlnGlyGlyArgArgGluAspGly---GlyProAla-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAAAGGTCGAG-----ATAAGACACAGT 1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGTGGCCAAC---TTCAGCCAGATTGAGACGCTGACCTCAGTGTTCCAGAAGAAGTTG 1022
 GAAATCAATTATGAAGACCACAAGTTGAAGTCAGGGACTAACACC------
                                                                                                               LeuMetLysLeuThrGlu------AspArgGluGlnIleArgGlnGlyLeuGlu 107
                                                                                                                                                                                          LysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThr
                                                                                                                                                                                                                                  GCCAGCAACTTCACAGGAGCCAAAAAGTGTCTAGTCAACTTAATTGAGAAGGTGGCAAGT 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValValValArgGlyAsnGlyPheArgHisAla 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTTCCCGGGTTCATTCTGTGCTACCTGGTCCCAAGTACTGTGCTGGCAAGGGGTCTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProSerThrIle-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                     GluLeu-----GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly 123
                                                                             TGGGTCAAAGTGTCTGÄAGCAGACAGCAGTAATGCAGACTGGGTCACGAAGCAGCTCAAT 1338
                                                                                                                                                      TATGGTGTGAAGCCA-----AGATATGGTCTAGTGACATATGCCACATACCCCAAAATT 1398
                                                                                                                                                                                                                                                                   -----LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHis 71
                                                                                                                                                                                                                                                                                                                                             ----CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCAGTAAGTCCTGCTCCTCTGTGGCTCTTCTCGGGGCATCGTTGGGATGAGGTCATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Andarmani, Susan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stache-Crain, Birgit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/10821234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US20050255114A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.0157
113.50
38.28*
19.58*
5.93*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----PysAlaGlyGluSerPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2501
66
63
109
99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----Glu
                                                                                                                                                                                                                                                                                                                                                                                      1572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               227
                                                                                                                                                                                            91
                                                                                                                                                                                                                                                                                                                                                 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-131-826A-293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 293, Application US/10131826A Publication No. US20050245730A1
                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                        APPLICANT:
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES.
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P330R1C128
CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Baker, Kevin P. APPLICANT: Beresini, Maur
                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1055 AACCAAGTGAACATCAATGCTTTGGCTTCCAAGAAAGACAATGAGCAACATGTGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1292 ---AAGAAGGCCCTCCAGGCAGTGTACAGCATGATGAGCTGGCCAGATGACGTCCCTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          163
                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301 AspGlyLeuSerPheIleSerSerValIleIleThrThrHisCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    261 IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           137 GlnGlyTyr---ArgThrAlaSerValIleIleAlaLeuThrAspGly---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       124 PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg------------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleGluIleLeuAlaAlaGluProSerThrIleÇysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGCAAAAACCCCAAGGGAGGATTATCTGGATGTCTATGTGTTTTGGGGTCGGGCCTTTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGly-----Val
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCGGGGACCCAATTACTGTCATTGATGAGATCCGGGACTTGCTATACATTGGCAAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----GluLeuHisGluAspLeuPhePheTyrSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAGGCTGGAACCGCCACCCGCCATGTCATCATCCTCATGACTGATGGATTGCACAACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----GGCATGGTTTGGGAACACAGGAAGGGTACCGAT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCAAGGAT---ATGGAAAACCTGGAAGATGTTTTCTACCAAATGATCGATGAAAGC---
                                                                                                                     Zhang, Zemin
                                                                                                                                Watanabe, Colin K
Wood, William
                                                                                                                                                                                                              Smith, Victoria
                                                                                                                                                                                                                                Sherwood, Steven
                                                                                                                                                                                                                                                  Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
                                                                                                                                                                                                                                                                                                           Gao, Wei-Qiang
Gerritsen, Mary E.
                                                                                                                                                                          Tumas, Daniel
                                                                                                                                                                                        Stewart, Timothy A
                                                                                                                                                                                                                                                                                                                                                 Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                     Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                      DeForge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                        Beresini, Maureen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGTGGTGTĆTGAGTACTTTGTGCTGAĆAGCAGCAĆATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----TACCACAAGCAACCATGGCAGGCCAAGATCTCAGTC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -CAGTCTCTGAGTCTCTGT----
                                                                                                 AND NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----
```

FILING DATE:

1997-06-18

```
8
                            Ş
                                                                맑
                                                                                            Ś
                                                                                                                                밁
                                                                                                                                                         S
                                                                                                                                                                                             밁
                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2 (1-368) x US-10-131-826A-293 (1-3449)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA
; ORGANISM: Homo
US-10-131-826A-293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 550
SEQ ID NO 293
LENGTH: 3449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/059352
FILING DATE: 1997-09-19
APPLICATION NUMBER: 60/059588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/059122
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059184
FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059115
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/059263 FILING DATE: 1997-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/056974 FILING DATE: 1997-08-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/059113
                                                                                                                                714
                                                                                                                                                             151
                                                                                                                                                                                                654
                                                                                                                                                                                                                               136
                                                                                                                                                                                                                                                               603
                                                                                                                                                                                                                                                                                             116
                                                                                                                                                                                                                                                                                                                             543
                                                                                                                                                                                                                                                                                                                                                                                              492
 822
                                189
                                                                                                171
                                                                                                                                                                                                                                                                                                                                                             96
                                                                                                                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           44
                                                                                            LeuGlyAlaIleValTyrCysValGlyVal-----LysAspPheAsnGluThrGlnLeu
                                                                                                                                                                                                GCAGAGGGGGCCCCTGAGGGAGAATGTGCCACGGGTCATAATGATCGTGACAGAT
                                                                                                                                                                                                                               ArgGlnGlyTyrArg------ThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                              GGCCTGCTCCAATAT------GGCAGCACTGTCAAGAATGAGTTCTCCCTCAAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGGAGTTCATCGTGGACATCTTGCAATTCTTGGACATTGGTCCTGATGTCACCCGAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TyrTyrPhe---ValGluGlnLeuAlaHisLysPheIleSerProGlnLeu---ArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACCTGGTTTTCATCATCACAGCTCTCGCAGTGTCAACACCCATGACTATGCAAAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AspLeuTyrPheIleLeuAspLysSerGlySerVal ---LeuHisHisTrpAsnGluIle
ATTGGGAGTGAGCCCCATGAGGACCATGTCTTCCTTGTGGCCAAT---TTCAGCCAGATT
                                                                                                                                                             GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                               ACCATGACTGGGCTGGCCATCCAGTAT------GCCCTGAACATCGCATTCTCAGAA
                                                                                                                                                                                                                                                                                             GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn
                                                                                                                                                                                                                                                                                                                             TTCAAGAGGAAGTCCGAGGTGGAGCGTGCTGTCAAGAGGATGCGGCATCTGTCCACGGGC
                                                                                                                                                                                                                                                                                                                                                          ThrGluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGly
                                                                                                                                                                                                                                                                                                                                                                                                                            SerPheIleValPheSerThrArgGlyThrThrLeu-------MetLysLeu
                                AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu
                                                                                                                                GGGAGACCTCAGGACTCCGTG------
                                                                ACGGCATCCTAATCTTTGCCATTGGTGTGGGCCAGGTAGACTTCAACACCTTGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.0263
113.50
43.90%
22.36%
5.93%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                -GCCGAGGTGĠĊŤGCTAAGGCAĊĠĠĠÁĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3449
55
53
103
35
                                 208
                                                                                                  188
                                                                                                                                                                170
                                                                                                                                                                                                                                                                653
                                                                                                                                                                                                                                                                                               135
                                                                                                                                                                                                                                                                                                                                                                                               542
                                                                                                                                                                                                                                                                                                                                                                                                                                                              491
   878
                                                                                                                                                                                                  713
                                                                                                                                                                                                                                150
                                                                                                                                                                                                                                                                                                                               602
                                                                                                                                                                                                                                                                                                                                                                                                                              95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           431
```

```
RESULT 8
US-10-601-368-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                              S
S
                                밁
                                                           Ş
                                                                                                    밁
                                                                                                                                    Ś
                                                                                                                                                                       밁
                                                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2 (1-368) x US-10-601-368-20 (1-3564)
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-601-368-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; SEQ ID NO 20
; LENGTH: 3564
; TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR PILING DATE: 1090-05-28
NUMBER: OF SEQ. ID NOS: 40
NUMBER: OF SEQ. ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: MUS TEATURE:
NAME/KEY: CDS
LOCATION: (1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                          592
134 GluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeu
                                                                  117 AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr
                                                                                                                                                                                                                                                                                                               475 TGCCAGACTTACATGGACATCGTCATTGTCTTAGATGGCTCCAACAGCATC---TACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity:
                                                                                                                                        97
                                                                                                                                                                                                       77 GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                                                                                                                                                                                                                                 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGluPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGTGTGCCATGGAGGAC 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerValThrLeuAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCAAACAAGGCTACATTCTCAACTCGGATCAGACGACTTGC-----AGAATCCAGGAT 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGCATAACTGTGCC-----CACTTCTGCATCAACATCCCTGGCTCATACGTCTGCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArgHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGACGCTGACCTCCGTGTTCCAGÀAGAAGTTGTGCACGGCCCACATGTGCAGCACCCTG
                                  GGGACAGAGACCCGCACGGCATTTGGCATTGAATTTGCACGCTCGGAGGCTTTCCAGAAG
                                                                                                      GluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                          CAGATCCAGGTCGGAATAGTCCAGTATGGAGAAGATGCCGTCCATGAGTTCCACCTT---
                                                                                                                                                                                                                                              TGGGTGGAGGTCCAACACTTCCTCATCAATATCCTCAAAAAGTTCTACATTGGCCCCGGC
                                                                                                                                                                                                                                                                             TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                                                                                                                                                 CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lora, Jose M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (3564)
                                                                                                                                                                                                                                                                                                                                                                                                                      0.0558
111.00
37.93%
24.14%
5.80%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AsnValAspArgValLeuCysSerPheLysIleAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                      3564
49
28
88
38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        248
                                                                                                                                          116
                                                                                                                                                                                                              96
                                                                                                                                                                                                                                                591
                                                                                                                                                                                                                                                                                                                                                   58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            228
     153
                                     768
                                                                                                        708
                                                                                                                                                                            648
                                                                                                                                                                                                                                                                                 76
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 9
US-10-601-368-19
                                                                                                                                                                                                                                                                                         US-09-970-076-2 (1-368) x US-10-601-368-19 (1-4858)
                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-601-368-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOPTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 19
LENGTH: 4858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19, Application US/10601368
Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Mus musculus
FEATURE:
NAME/KEY: CDS
LOCATION: (28)...(3591)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: LOYA, JÖBE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Pan, Yang APPLICANT: Lora, Joi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                208
                                                           619
                                                                                                                                     559
                                                                                                                                                                                                                 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 769
                                                                                                                                                                           59
                       97
TGCCAGACTTACATGGACATCGTCATTGTCTTAGATGGCTCCAACAGCATC---TACCCC
                                                                                                                                                                                                                                                 CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGGAAGGC 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuGlnGly 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGGCGGCCCTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TACGCTGTGGCCGTTTTGGGCTACTACAACCGCAGGGGGGATCAATCCAGAGACTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACGACAGCCCAGACCTGGAGAAGGTGATCCGGCAGAGCGAGAAGGACAACGTGACCAGA 882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           H18GluAsp------
                                                         CAGATCCAGGTCGGAATAGTCCAGTATGGAGAAGATGCCGTCCATGAGTTCCACCTT---
                                                                                             GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                     TGGGTGGAGGTCCAACACTTCCTCATCAATATCCTCAAAAAGTTCTACATTGGCCCCGGC
                                                                                                                                                                       TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATGAAATCAAATACATCGCCAGCGACCCTGACGACAAGCACTTCTTCAACGTCACAGAT 1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlyAlaIleValTyrCysValGlyValLysAsp-----PheAsnGluThrGln 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTGGAAGAAAAGGGGCCCAAG-----AAAGTGATGATTGTCATCACGGACGGGAATCC 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (3591)
                                                                                                                                                                                                                                                                                                                                                 0.0916
111.00
37.93%
24.14%
5.80%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -AAGGACATTGTTGATGCCCTTGGGGACAGGATCTTCAGC 1052
                                                                                                                                                                                                                                                                                                                                                 Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AND USES THEREOF
                                                                                                                                                                                                                                                                                                                               485
88
38
9
                                                                                               96
                                                                                                                                                                         76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             942
                                                           675
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; LENGTH: 3175
; TYPE: DNA
; ORGANISM: Homo s
US-10-995-561-464
                                   문
                                                                         8
                                                                                                                 밁
                                                                                                                                                 ঠ
                                                                                                                                                                                           문
                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 10
US-10-995-561-464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                     US-09-970-076-2 (1-368) x US-10-995-561-464 (1-3175)
                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: FastSEQ for Windows Version SEQ ID NO 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 464, Appublication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RES
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CL001559
CURRENT APPLICATION INVESER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 85702
                                                                                                                                                                                                                                                                                                                                                                                                         No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081 TTGGAAGGC 1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1030 GAGGCGGCCCTG---
                                       363 CTGGACCAGGTGGCGCTGAGCTGGCGCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG
                                                                                                                                                                                           208 LeuGlnGly 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   850 CACGACAGCCCAGACCTGGAGAAGGTGATCCGGCAGAGCGAGAAGGACAACGTGACCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               134 GluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeu 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           117 AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91 ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGln 110
                                                                                                                                                   56 LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                       45 LeuTyrPheIleLeuAspLysSerGlySerVal----
                                                                                                               LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATGAAÁTCAAATÁCATCGCCAGCGACCCTGÁCGACAAGCACTTCTTCAACGTCACAGAT 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACGCTGTGGCCGTTTTGGGCTACTACAACCGCAGGGGGATCAATCCAGAGACTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----GeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGGAÁGÁAAAGGGGCCAAG-----AAAGTGATGATTGTCATCÁCGGÁCGGGGÁATCC 849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGACAGAGACCCGCACGGCATTTGGCATTGAATTTTGCACGCTCGGAGGCTTTTCCAGAAG
                                                                         SerProGlnLeuArgMetSerPhe-----IleValPheSerThrArgGlyThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlyAlaTleValTyrCysValGlyValLysAsp------pheAsnGluThrGln 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/10995561
o. US20050272054A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                           0.123
107.50
40.28%
23.15%
5.62%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGGACATTGTTGATGCCCTTGGGGACAGGATCTTCAGC 1080
                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                           3175
50
37
84
45
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESPONSE, METHODS
                                       422
                                                                                                                   362
                                                                                                                                                       74
                                                                                                                                                                                             302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         795
                                                                             90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ဝူ
```

문 δ 밁 Ś 밁 Ş 밁 र् 밁 ð 밁

ş 밁 ફ 문 ঠ 밁 ş

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                밁
                                            á
                                                                                В
                                                                                                                Ś
                                                                                                                                                    밁
                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                        US-09-970-076-2 (1-368)
                                                                                                                                                                                                                                                                        Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo US-10-995-561-465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 11
US-10-995-561-465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 465, Application US/10995561
Publication No. US20050272054A1
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CLO01559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 465
LENGTH: 3464
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                              .
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  423
                                                                                  303
                                                                                                                                                      243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     182
                                                                                                                  56
                                                                                                                                                                                      45
                                                75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGGGCATCCGGCTCTTCGCCGTGGCCCCAACCAGAACCTGAAGGAGCAGGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuGlyAlaIleValTyrCysVal------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTTCCGCCGCGC-----ACCTTCACCGACTGCGCGCTGGCCAACATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                CTGGACCAGGTGGCGCTGAGCTGGCGCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG
                                                                                                                                                      GTGTACTTCGTGCTGGACACCTCGGAGAGCGTCACCATGCAGTCCCCCACGGACATCCTG
                                                                                                                                                                                      LeuTyrPheIleLeuAspLysSerGlySerVal------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATCAAGGTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACATCGCCAGCACGCCGCACGAGCTCTACCGC------AACGACTACGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                              SerProGlnLeuArgMetSerPhe------IleValPheSerThrArgGlyThr
                                                                                                                  LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCCACGTCACCGGCAGCCCCTGCGGGGGCATCAAGCTGCAGGCCGAGCGGGCCCGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCCGGCAGGACCGCAGCAAGGGC-----ACCGTCCACTTCGCCGTGGTCATCACCGAC
                                                                                  sapiens
                                                                                                                                                                                                                                                                       0.142
107.50
40.28%
23.15%
5.62%
                                                                                                                                                                                                                          x US-10-995-561-465 (1-3464)
                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -LysLysSerCysIleGluIle 223
                                                                                                                                                                                                                                                            3464
50
37
84
45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESPONSE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         METHODS
                                                                                  362
                                                                                                                    74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  482
                                                                                                                                                                                        55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
US-10-995-561-466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                       S
                                                                  밁
                                                                                                Ś
                                                                                                                                      밁
                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
밁
                                                                                                                                                                                                        US-09-970-076-2 (1-368) x US-10-995-561-466 (1-3468)
                                                                                                                                                                                                                                                          Query Match:
                                                                                                                                                                                                                                                                          Best Local Similarity:
                                                                                                                                                                                                                                                                                              Percent Similarity:
                                                                                                                                                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                  US-10-995-561-466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 466, Applic
Publication No. US20
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RES
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CL001559
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT FILING DATE: US/10/995,561
CURRENT FILING DATE: 2004-11-24
NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 3468
                                                                                                                                                                                                                                                                                                                                No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            151
363
                                                                  243 GTGTACTTCGTGCTGGACACCTCGGAGAGCGTCACCATGCAGTCCCCCACGGACATCCTG
                                                                                                    56 LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                  75
                                                                                                                                                               45 LeuTyrPheIleLeuAspLysSerGlySerVal-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATCAAGGTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGGCATCCGGCCTTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuGlyAlaIleValTyrCysVal-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCCACGTCACCGGCAGCCCCTGCGGGGGCATCAAGCTGCAGGCCGAGCGGGCCCGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCCGGCAGGACCGCAGCAAGGGC-----ACCGTCCACTTCGCCGTGGTCATCACCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCTTCCGCCGCGC-----ACCTTCACCGACTGCGCGCTGGCCAACATGACGGAGCAG
CTGGACCAGGTGGCGCTGAGCTGGCGCCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG
                                SerProGlnLeuArgMetSerPhe-----IleValPheSerThrArgGlyThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACATCGCCAGCACGCCCGCACGAGCTCTACCGC-----AACGACTACGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArqSerArqAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGln 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/10995561
o. US20050272054A1
                                                                                                                                                                                                                                            0.142
107.50
40.28%
23.15%
5.62%
                                                                                                                                                                                                                                                          Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysLysSerCysIleGluIle 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----GlγValLys
                                                                                                                                                                                                                                          3468
50
37
84
45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DRUG RESPONSE,
```

199

710

216 758 181 650 170 590 536

150

482

METHODS

ဝှု

90

74 302

591

882

156

942

```
APPLICANT: LOTA, JÕBE M.
TITIE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/99/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US/99/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FABESEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 3564
                              밁
                                                                   ર્
                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        १
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                            US-09-970-076-2 (1-368)
                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-601-368-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Pan, Yang APPLICANT: Lora, Joi
                                                                                                                                                                                                                                                                                                                                           NAME/KEY: CDS
LOCATION: (1)
                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                             Match:
                                                                                                                                                                                                                                                           Хо
::
                              475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAAATC 866
                         TGCCAGACCTACATGGACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCC
                                                            CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATCAAGGTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGGGCATCCGGCTCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCCACGTCACCGGCAGCCCCTGCGGGGGCATCAAGCTGCAGGCCGAGCCGGGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACATCGCCAGCACGCCGCACGAGCTCTACCGC-----AACGACTACGCCACC 758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ileTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAsp 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTTCCGCCGCGGC-----ACCTTCACCGACTGCGCGCCGACCATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGln 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCCGGCAGGACCGCAGCAAGGGC-----ACCGTCCACTTCGCCGTGGTCATCACCGAC
                                                                                                                                                                                                                                                                                                                                           (1) ... (3564)
                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                     0.171
107.00
37.93%
24.14%
5.59%
                                                                                                            x US-10-601-368-2 (1-3564)
                                                                                                                                                 Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysLysSerCysIleGluIle 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AND USES THEREOF
                                                                                                                                                     3564
288
388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
FILE REFERENCE: 785CIP4CN
CURRENT APPLICATION NUMBER: US/11/000,463
CURRENT FILING DATE: 2004-11-29
PRIOR APPLICATION NUMBER: 10/291,265
PRIOR FILING DATE: 2002-11-08
PRIOR FILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
PRIOR PPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR PILING DATE: 2000-07-17
PRIOR PILING DATE: 2000-08-03
PRIOR PILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR PILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/633,870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-11-000-463-574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Tang, Y
APPLICANT: Liu, C
APPLICANT: Asundi
APPLICANT: Chen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                        APPLICANT: Cao, Yi-Cheng
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1054 CTGGAAGGC 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1003 GAGGCTGCCTTG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               208 LeuGlnGly 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                592 CAGATCCAGGTTGGAGTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                154 HisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGAAATCAAATACATCGCCAGTGACCCCTGATGACAAGCACTTCTTCAATGTCACTGAT 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlyAlaIleValTyrCysValGlyValLysAsp------PheAsnGluThrGln 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATGCGGTGGCCGTCCTGGGCTACTACACCGCAGGGGGGATCAATCCAGAAACTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluAsnArgGlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeu 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAACAGAGACCCGGACGGCATTTGGCATTGAATTTGCACGCTCAGAGGCTTTCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGly 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGGTGGAGGTTCAGCACTCCTCATCAACATCCTGAAAAAGTTTTTACATTGGCCCAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHistysPhe---IleSerPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ------LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACGACAGCCCAGACCTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGGAAGGAAAGGAGCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                     Zhang, Jie
Zhou, Ping
                                                                                                                                                                                                                                                                                                                                                                             Zhou, Ping
Cao, Yi-Cheng
                                                                                                                                                                                                                                                                                                                                                                                                                                              Wang, Zhiwei
Wehrman, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Liu, Chenghua
Asundi, Vinod
                                                                                                                                                                                                                                                                                                                                                                                                                                            Wehrman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/11000463
D. US20050266423A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Y Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Xiaohong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGC
```

```
NUMBER OF SEQ ID NOS: 944
; SOFTWARE: FastSEQ for Windows Ve
; SEQ ID NO 574
; LENGTH: 3967
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-000-463-574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
GENERAL INFORMATION:
APPLICANT: Tang, Y Tom
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Chen, Rui-hong
APPLICANT: Qian, Xiaohong
                                                                                                                                                                                             US-11-000-463-102
                                                                                                                                                                                                                      RESULT 15
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-2 (1-368)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No.:
                                                                                                                                                Sequence 102, Application US/11000463 Publication No. US20050266423A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                     1103 CTGGAAGGC 1111
                                                                                                                                                                                                                                                                                                                                                                  1052 GAGGCTGCCTTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     524 TGCCAGACCTACATGGACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCC
                                                                                                                                                                                                                                                                                                                  208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeu 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                         aatgaaatcaaatacatcgccagtgaccctgatgacaagcacttcttcaatgtcactgat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGGTGGAGGTTCAGCACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGG
                                                                                                                                                                                                                                                                                                                  LeuGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                            LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlyAlaīleValTyrCysValGlyValLysAsp------PheAsnGluThrGln 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATGCGGTGGCCGTCCTGGGCTACTACAACCGCAGGGGGATCAATCCAGAAACTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACGACAGCCCAGACCTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTGGAAGGAAAGGAGCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAACAGAGACCCGGACGGCATTTGGCATTGAATTTGCACGCTCAGAGGCTTTCCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspThrTyrMetH1sGluGlyPheGlu------ArgAlaSerGluGlnIleTyrTyr 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGATCCAGGTTGGAGTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
    Xiaohong
                      Rui-hong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.203
107.00
37.93%
24.14%
5.59%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ×
                                                                                                                                                                                                                                                                                                                     210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-11-000-463-574 (1-3967)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Version

    AAGGACATTGTCGATGCCCTGGGGGGACAGAATCTTCAGC

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3967
49
28
88
38
                                                                                                                                                                                                                                                                                                                                                                    1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                              105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        156
                                                                                                                                                                    5
                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Zhang, Jie APPLICANT: Zhou, Ping APPLICANT: Cao, Yi-Cheng APPLICANT: Cao, Yi-Cheng APPLICANT: Drmanac, Radoje T. TITLE OF INVENTION: NOVel Nucleic Acids and FILE REFERENCE: 785CIP4CN CURRENT APPLICATION NUMBER: US/11/000,463 CURRENT FILING DATE: 2004-11-29 PRIOR APPLICATION NUMBER: 10/291,265 PRIOR FILING DATE: 2002-11-08 PRIOR APPLICATION NUMBER: PCT/US01/02623 PRIOR FILING DATE: 2001-08-03 PRIOR FILING DATE: 2001-08-03 PRIOR APPLICATION NUMBER: 09/491,404 PRIOR APPLICATION NUMBER: 09/491,404 PRIOR APPLICATION NUMBER: 09/617,746 PRIOR APPLICATION NUMBER: 09/617,746 PRIOR FILING DATE: 2000-07-17 PRIOR APPLICATION NUMBER: 09/631,451 PRIOR APPLICATION NUMBER: 09/631,451 PRIOR APPLICATION NUMBER: 09/633,870 PRIOR APPLICATION NUMBER: 09/633,870 PRIOR APPLICATION NUMBER: 09/633,870 PRIOR APPLICATION NUMBER: 09/633,870 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILING DATE: 2000-09-15 PRIOR PILI
                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2 (1-368) x US-11-000-463-102 (1-3969)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similari
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-11-000-463-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 944
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 102
LENGTH: 3969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
NAME/KEY: CDS
LOCATION: (52)..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                        154 HisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                   643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          526 TGCCAGACCTACATGGACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           59 TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity:
                                                                                                                                                                                                                                                                                                                                                                    97
                                                                                                                                                                                                                                                                                                                                                                                                                                     77 GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         39 CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGGTGGAGGTTCAGCACTTCCTCAACATCCTGAAAAAGTTTTACATTGGCCCAGGG
                                                                                                                                                                                                                                                                                                                     GluaspargGluGlnIleargGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGly
                                CACGACAGCCCAGACCTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGA
                                                                                                                          GGTGGAAGGAAAGGAGCCAAG-----AAGGTGATGATGATCACAGATGGGGAGTCC 873
                                                                                                                                                        GluAsnArgGlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeu
                                                                                                                                                                                                                      GGAACAGAGACCCGGACGGCATTTGGCATTTGAATTTGCACGCTCAGAGGCTTTCCAGAAG
                                                                                                                                                                                                                                                                   AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                   CAGATCCAGGTTGGAGTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (3618)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.203
107.00
37.93%
24.14%
5.59%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic Acids and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Polypeptides
```

933

156

116

759

96

642 76

699

Searc	문	ş	B	ş	В	ş	₽	ફ
h completime : 324	1105	208	1054	188	994	172	934	157
Search completed: December 19, 2005, 02:29:25 Job time : 324.957 secs	1105 CTGGAAGGC 1113	208 LeuGlnGly 210	1054 GAGGCTGCCTTGAAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGC 1104	188 LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 207	994 AATGAAATCAAATACATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGAT 1053	172 GlyAlaIleValTyrCyeValGlyValLysAspPheAsnGluThrGln 187	934 TATGCGGTGGCCGTCCTGGGCTACTACAACCGCAGGGGGATCAATCCAGAAACTTTTCTA 993	157LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu 171
			04	7	53	7	ω	Р



Run 8

95

Sequence:

Sequence 55, Appl Sequence 55, Appl Sequence 55, Appl Sequence 55, Appl Sequence 55, Appl Sequence 55, Appl Sequence 55, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli

```
Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein - protein search, using
                                                                                                                                                                                                                                                                                                                                                            Pred. No.
                                                                                                                                                                                                                                                                                      Score
  159.5
159.5
159.5
159.5
159.5
159.5
159.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   seq length:
seq length:
                                                                                                              1666666
                                                                                                                                                                                   166
                                                                                                                                                                                                       166
166
166
                                                                                                                                                                                                                                                                                                                                       greater than or equal to the score of the derived by analysis of the total score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                              is the number of results predicted by chance to have a ster than or equal to the score of the result being printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-2_COPY_27_321
1536
1 GQGGRREDGGPACYGGPDIV
                                                                                                                                                                                                                                                                                                                                                                             Issued Patents AA:*

1: /cgn2_6/ptodata/1/iaa/5_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/H_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/H_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/PETUS_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/RE_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
                                                                                                                                                                                                                                                                                      Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      572060 Beqs, 82675679 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              December 14, 2005, 11:02:37; Search time 26.6032 Seconds (without alignments) 916.781 Million cell updates/sec
                                                                                                                                                                                                                                                                                                 Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Minimum Match 0%
Maximum Match 100%
Listing first 45 sm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gapop 10.0 ,
  GQGGRREDGGPACYGGFDLY.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Copyright
                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000000000
  1155
1155
1155
1155
1155
1155
1155
1161
1161
1161
1161
1151
1151
1151
1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                       명
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gapext 0
US-10-104-047-2639
US-08-485-618-46
US-08-485-618-46
US-08-605-672-46
US-08-605-672-46
US-08-943-363-46
US-09-193-043-46
US-09-193-043-46
US-09-688-307A-46
US-09-688-307A-46
US-08-485-618-53
US-08-485-618-53
US-08-485-618-53
US-08-943-363-53
US-08-943-363-53
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-09-688-307A-37
US-09-688-307A-37
US-09-688-307A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                               summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sw model
                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                         distribution
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ltd
                                                                                                                                                                                                                                                                                      Description
                             Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                         Sequence
Sequence
Sequence
                                                                                                                       Sequence
Sequence
Sequence
Sequence
                                                                                                                                                               Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                             Sequence
  Sequence 2639, Application US/10104047

Retent No. 6943241

GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. 6943241el full length cDN
FILE REFERENCE: H1-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
PRIOR PILING DATE: 2002-03-25
PRIOR PILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 9810 NOS: 4096
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 2639
LENGTH: 488
TYPE: PRT
ORGANISM: Homo sapiens
US-10-104-047-2639
                              RESULT 2
US-08-286-889-46
                                                                                                                                S
                                                                                                                                                                     S
                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1
US-10-104-047-2639
                                                                                      δ
                                                                                                             밁
                                                                                                                                                     밁
                                                                                                                                                                                            밁
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                       Ś
Sequence 46, Application US/08286889 Patent No. 5470953 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                             Matches 157;
                                                                                                                                                                                                                                                                                      Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  159.5
159.5
159.5
159.5
159.5
159.5
156.5
156.5
156.5
156.5
156.5
156.5
156.5
156.5
156.5
156.5
156.5
156.5
156.5
156.5
156.5
                                                                       264
                                                                                         240
                                                                                                              204
                                                                                                                                 180
                                                                                                                                                     144
                                                                                                                                                                120 IALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGF
                                                                                                                                                                                            98
                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                    26 GPGGLLRAQEQPSCRRAFDLYFVLDKSGSVANNWIEIYNFVQQLAERFVSPEMRLSFIVF
                                                                                                                                                                                                                                               1 GQGG-RREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVF
                                                                                                                                                                                                                                                                                      Similarity
                                                                       TTSVKPVSVQLNSMLCPAPILNKAGETLDVSVSFNGGKSVISGSLIVTATECSNG
                                                                                          TLNEKPESVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG 294
                                                                                                                        QALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVVRGNGFRHARNVDRVLCSFKINDSV
                                                                                                                                                     IALTDGKLDGLVPSYAEKEAKISRSLGASVYCVGVLDFEQAQLERIADSKEQVFPVKGGF
                                                                                                                                                                                                       STRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVI
                                                                                                              QALKGIINSILAQSCTEILELQPSSVCVGEEFQIVLSGRGFMLGSRNGSVLCTYTVNETY
                                                                                                                                                                                              SSQATIILPLTGDRGKISKGLEDLKRVSPVGETYIHEGLKLANEQI--QKAGGLKTSSII
                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                110.4
110.4
110.4
110.4
110.4
110.2
110.2
110.2
110.2
110.2
110.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                51.5%;
                                                                                                                                                                                                                                                                            54; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-485-618-55
US-08-362-652-55
US-08-362-672-55
US-08-482-293A-55
US-08-943-363-55
US-09-193-043-56
US-09-688-907A-55
US-09-150-259-55
US-09-188-207A-52
US-08-485-618-2
US-08-485-618-2
US-08-485-618-2
US-08-485-672-2
US-08-605-672-2
US-08-605-672-2
US-08-605-672-2
US-08-605-672-2
US-08-605-673-9
US-08-482-293A-9
US-08-482-293A-9
                                                                                                                                                                                                                                                                            Score 790.5; DB 2;
Pred. No. 1.1e-78;
4; Mismatches 81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ALIGNMENTS
                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                             Indels
```

488; ω •-

Gaps

179

239

203

119

85

59 N

143

Regult No.

790

acore

ĺθ

Minimum DB Maximum DB

Total number

Database

```
밁
                                                                                                                                                                                                                                                                                                                                                                       გ
                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                               US-08-485-618-46
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-286-889-46
                                                                                                                                                          Sequence 46, Application US/08485618 Patent No. 5728533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local (
                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                  APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5728533el NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 238,699
REFERENCE,DOCKET NUMBER: 2786
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 28.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH:
                                                                                                                                                                                                                                                                                                         174
                                                                                                                                                                                                                                                                                                                                          259
                                                                                                                                                                                                                                                                                                                                                                             123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    144
                                                                                                                                                                                                                                                                                                                                                                                                              204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                               69 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60606-6402
                                                                                                                                                                                                                                                                     KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                       PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 227
                                                                                                                                                                                                                                                                                                                                                                           TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                          TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1155 amino acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P38,659
ER: 27866/32168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 166; DB 1; L. Pred. No. 7.4e-09; Pred. No. 7.4e-09;
                                                                                        Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 Integrin Alpha Subunit
                                                                                        N
                                                                                      Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels 30;
                                                                                      Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                             173
                                                                                                                                                                                                                                                                                                                                                                                                                258
                                                                                                                                                                                                                                                                                                                                                                                                                                               122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     83
                                                                                                                                                                                                                                                                                                                                          315
```

```
Ś
                                                                                                                                                                                                                                                RESULT 4
US-08-362-652-46
                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; MOLECULE TYPE: protein US-08-485-618-46
                                                                                                                                                                                                        Sequence 46, Application US/08362652
Patent No. 5766850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                            GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Und der Vieren, Monica
TITLE OF INVENTION: No. 5766850el
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                     NUMBER OF SEQUENCES: 93
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS
LENGTH: 1155 amino aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph J
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US FILING DATE: 5-AUG-1994 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 23-DEC-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 312-1.
TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 0 FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
COUNTRY:
                                                   STREET:
                                                                                                                                                                                                                                                                                                                                                               174 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 227
                                                                                                                                                                                                                                                                                                                         316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                        123 TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 69 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    66;
                 Chicago
Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               amino acid
                                                                                                                                                                                                                                                                                                                                                                                                    TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1155 amino acids
                                                     233 South Wacker
United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   States
                                                                                                               ..
93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10.8%; Score 166; DB 1; 28.2%; Pred. No. 7.4e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/485,618
                                                   O'Toole, Gerstein, Murray & Borun
cker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Version
                                                                                                                                N
                                                                                                                                Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
```

12;

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                RESULT 5
US-08-605-672-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-362-652-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                        Sequence 46, Application US/08605672 Patent No. 5817515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amino aci
TYPE: amino acid
                               ZIP: 60605-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                            TITLE OF INVENTION.

NUMBER OF SEQUENCES: 103

CORRESPONDENCE ADDRESS:

CORRESPONDENCE ADDRESS:

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun

ADDRESSEE: Marshall, O'Toole, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                    APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5817515el
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/362,652 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER:
                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      174 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             66
                                                                                                                                        Chicago
                                                                               60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TDGELHEDLFFYSB--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                              KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-3856
                                                                                                                       Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1155 amino acide
                                                                                                  United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
  PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10.8%; Score 166; DB 1; 28.2%; Pred. No. 7.4e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 46:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 1155;
                                                                                                                                                                                                                                           2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                   US-08-482-293A-46
                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                       Sequence 46, Application US/08482293A
Patent No. 5831029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                 STREET: 225
CITY: Chicago
CITY: Illinois
Traited
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 23-DEC-----
FILING DATE: 23-DEC------
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
APPLICATION TATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                       APPLICANT: Gallatin, W. Mic
APPLICANT: Van der Vieren,
TITLE OF INVENTION: NO. 583
NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 2'
TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                    ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      174 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66;
                                                                                                                  TRY: United States 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               amino acid
GY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1155 amino acids
                                                                                                                                                                                                 233 South Wacker Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                 Marshall, O'Toole, Gerstein, Murray & Borun
3 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10.8%; Score 166; DB 1; 28.2%; Pred. No. 7.4e-09; tive 42; Mismatches 96;
                                                                                                                                                                                                                                                                                                                    W. Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/08/605,672
                                                                                                                                                                                                                                                                              5831029el Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27866/32684
                  Version
                                                                                                                                                                                                                                                                              2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30;
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                           US-08-943-363-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-482-293A-46
                                                                                                                                                                                                                                                                                                                                  Sequence 46, Apprint No. 5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENCTH: 1155 ami-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                              TITLE OF INVESTIGATION OF THE OF INVESTIGATION OF THE OFFICE ADDRESS:

CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun ADDRESSEE: Marshall, O'Toole, G300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                       STREET: LIGO
CITY: Chicago
CITY: Illinois
'mited
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
                  SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el Human
                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 08/362,652 FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              174 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      204 FTEFKSSLSPQSLVDAIVQLQ----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            144
                                                                                                                                                                                                                                                                                                                                                                                                                                               316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         69 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  66;
                                                                                                                         TRY: United States
60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
XGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                       Application US/08943363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1155 amino acids
                                                                                                                                                                                                                                                                                                 Gallatin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10.8%; Score 166; DB 1; I
28.2%; Pred. No. 7.4e-09;
tive 42; Mismatches 96;
                                                                                                                                                                                                                                                                                                   W. Michael
US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             46:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27866/32684
                                        Version
                                                                                                                                                                                                                                                                  2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 8
US-09-193-043-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                     Sequence 46, Appr...
                                    SEQ ID NO 46
LENGTH: 1155
                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                       SOFTWARE: PatentIn
                                                                                                                                                                                                                                                                                                                                      APPLICANT: Gallatin,
                      TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amino acid
```

S

```
; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-943-363-46
                                                                                                                                                 EARLIER APPLICATION NUMBER: 08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:

NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                EARLIER FILING DATE: 1997-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US FILING DATE: 5-AUG-1994 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LECOMMU... 31z--. TELEPHONE: 31z--. 31z-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 21-DEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   174 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             123 TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        69 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/09193043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-DEC-1994
                                                                              Ver.
                                                                                                                                                                                                                                                                                                                                                                     Michael W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         46:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 166; DB 1;
Pred. No. 7.4e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                364
```

```
Ś
                                                                                    밁
                                                                                                                             श
                                                                                                                                                                        밁
                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: PRT ; ORGANISM: Mus musculus US-09-688-307A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-688-307A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; SOFTWARE: Pate:
; SEQ ID NO 46
; LENGTH: 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 46, Application US/09688307A Patent No. 6432404 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 08/605,672
PRIOR FILING DATE: 1996-02-22
PRIOR APPLICATION NUMBER: 08/173,497
PRIOR FILING DATE: 1993-12-23
PRIOR APPLICATION NUMBER: 08/286,889
PRIOR FILING DATE: 1994-08-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 08/362,652
PRIOR FILING DATE: 1994-12-21
PRIOR APPLICATION NUMBER: 08/943,363
PRIOR FILING DATE: 1997-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/688,307A
CURRENT FILING DATE: 2000-10-13
PRIOR APPLICATION NUMBER: 09/133,043
PRIOR FILING DATE: 1998-11-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 6432404el Human FILE REFERENCE: 27866/36646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Gallatin, APPLICANT: Van der v
                                           174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                174
  316
                                                                                                                               123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       144
                                                                                                                                                                        204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                           144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                    69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  H
                                                                                                                                                                                                                                                                                      11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 Similarity
66; Conserv
                                                                                                                                                                                                                                                                                                                                                    66;
                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PatentIn Ver.
                                      PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVVRGNGFRHARNVD 227
                                                                                                                                                                                                               LTEDR----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIJAL 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD
KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD
                                                                                                                             TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 173
                                                                                    TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Michael W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10.8%; Score 166; DB 2; Length 1155;
28.2%; Pred. No. 7.4e-09;
tive 42; Mismatches 96; Indels 3
                                                                                                                                                                                                                                                                                                                                                                    10.8%; Score 166; DB 2; Length 1155; 28.2%; Pred. No. 7.4e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                 42;
                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Beta-2
                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                258
```

```
APPLICANT: GALLATIN, Michael W.
APPLICANT: Van der Vieren, Monica
ITILE OF INVENTION: No. 6620915el Human 2
FILE REFERENCE: 27866/35004
CURRENT APPLICATION NUMBER: US/09/350,259
CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/193,043
EARLIER FILING DATE: 1998-11-16
EARLIER FILING DATE: 1998-11-16
EARLIER FILING DATE: 1998-12-23
EARLIER FILING DATE: 1998-12-23
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-12-21
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER FILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
SOPTWARE: PATENTIN POS: 114
SOPTWARE: PATENTIN POS: 120
SEQ ID NO 46
LENGTH: 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: PRT ; ORGANISM: Mus musculus US-09-350-259-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 10
US-09-350-259-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-485-618-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                     Sequence 53, Application Patent No. 5728533
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 46, Appl Patent No. 662091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM Propatible
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0.
CURRENT APPLICATION DATA:
                                                                                                                                                         STREET: Chicago
CITY: Chicago
Thicago
Thicago
Thicago
Thicago
                                                                                                                                                                                                                                                                                                                       APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5728533el
                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS: ADDRESSEE: Marshall, O'Toole,
                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                          ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     174 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 68
                                                                                                                                      TRY: United States 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/08485618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09350259
                                                                                                                                                                                                                              233 South
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                Wacker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10.8%; Score 166; DB 2; 1 28.2%; Pred. No. 7.4e-09; tive 42; Mismatches 96;
                                                                                                                                                                                                                                                                                                   103
                                                                                                                                                                                                                                Drive,
                          #1.0,
                                                                                                                                                                                                                                                      Gerstein, Murray
                                                                                                                                                                                                                                                                                                                           Human
                            Version
                                                                                                                                                                                                                                     Sear
                                                                                                                                                                                                                                                                                                                           2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30;
```

```
US-08-362-652-53
                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-485-618-53
                                                                                                                                                                                                                                                                          PATENT NO. 5766850

GENERAL INFORMATION:

APPLICANT: Gallatin, W. Michael

APPLICANT: Van der Vieren, Monica

APPLICANT: Van der Vieren, Monica
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 66
                                                                                                                                                                                                                                                                                                                                                          Sequence 53, Approx. 5766850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1161 ami-
         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US (
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION DATA:
PRIOR APPLICATION UNMBER: US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 312-4-0448
                                                                                                                                                                           STREET: 233 Sout
CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             174 PVNDGFOALOGIIHSILKKSCIEILAAEPSTICAGESFOVVVRGNGFRHARNVD 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66;
                                                                                                                                         TRY: United States 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATION NUMBER: US 08/362,652
NG DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 173
DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                 Application US/08362652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1161 amino acids
                                                                                                                                                                                                                 233 South Wacker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                   Marshall, O'Toole, Gerstein, Murray & Borun
3 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        42; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 166; DB 1; Length 1161; Pred. No. 7.4e-09;
                                                 Version
                                                                                                                                                                                                                                                                                       2 Integrin Alpha Subunit
                                                   #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
```

S

밁 ફ 밁

뭉 S 맑 Ś

```
; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-362-652-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
US-08-605-672-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 53, Application US/08605672 Patent No. 5817515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Gallatin, W. Michael
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
APPLICANT: No. 5817515el
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
APPLIANCE
FILING DATE:
FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
APPLICATION DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                       STREET: Chicago
CITY: Chicago
TNATE: Illinois
Tinited
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
                                                                                                                                 COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIAN Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/605,672
                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                      TITLE OF ANY SEQUENCES: 103

NUMBER OF SEQUENCES: 103

CORRESPONDENCE ADDRESS:

ANDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun

ANDRESSEE: Marshall, O'Toole, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 27:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                       COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFOHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          174 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             123 TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  69 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                        Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10.8%; Score 166; DB 1;
28.2%; Pred. No. 7.4e-09;
                                                                                                                                        US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 53:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human
                                                                                                                                                                                   Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30;
```

258 122 203

12

```
RESULT 14
US-08-482-293A-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             श
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-605-672-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 53, Application US/08482293A Patent No. 5831029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Gallatin, W. Mic
APPLICANT: Van der Vieren,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino aci
                                                                                                                                                                                                                                                                                        STREET: Chicago
CITY: Chicago
Illinois
Thrited
                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 0: FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: U
FILING DATE: 23-DEC-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: No. 5831029el Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
                                                                                                                           APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                        COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             174 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69 LTEDR----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1161 amino acids
                                                                                                                                                                                                                                                                                                                                               E: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                               Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   312-474-6300
                                                     23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          W. Michael
                                                                                                                                                                                                                                                                                                                                                                                                      103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US 08/286,889
                                                                      US 08/173,497
                                                                                                                                             US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            53:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Monica
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 166; DB 1; Length 1161; Pred. No. 7.4e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                   Version
                                                                                                                                                                                                                                                                                                                                                                                                                      2 Integrin Alpha Subunit
                                                                                                                                                                                   #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
```

```
망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-943-363-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-482-293A-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent No. 5837478
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 53,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 10.8%;
Best Local Similarity 28.2%;
                    APPLATANCE 23-DECTATOR PRIOR APPLICATION NUMBER: US 08
APPLICATION NUMBER: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                          FILING DAIL. 530
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
APPLICATION NUMBER: 23-DEC-1993
                                                                                                                                                                                                                              ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino acids
FILING DATE: 5-AUG-1
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: 312-474-6300
                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                        STATE:
                                                                                                                                                                                                                                                                                                                                                                       STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                        CITY:
                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 0 FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          174 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             66; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  69 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 68
                                                                                                                                                                                                                                                                                                                                    Chicago
: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/08943363
                                                                                                                                                                                                                                                                                                                                                                       E: Marshall,
233 South Wa
                                                                                                                                                                                                                                                                                                                                                                                                                     Van der Vieren, Monica
Van der Vieren, Monica
Van der Vieren, Monica
                                                                                                                                                                                                                                                                                                                      United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein
                                                                                                                                                                                                                                                                                                                                                                     ll, O'Toole, Ge
Wacker Drive,
                                                   US 08/286,889
 US 08/362,652
                                                                                                                                                                          US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 166; DB 1; ~~
Pred. No. 7.4e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27866/32684
                                                                                                                                                                                                                                                                                                                                                                         e, 6300 Sear Tower
                                                                                                                                                                                                               Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                             2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
```

258

```
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
Williams Jr., Joseph A.
REGISTRATION UMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32684
FILLECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TOPOLOCY: linear
MOLECULE TYPE: protein
US-08-943-363-53
                                                                                                                                                                                             밁
                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                          ઇ
Search completed: December 14, 2005, 11:21:05 Job time : 27.6032 secs
                                                                                                                                       S
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 10.8%; Score 166; DB 1; Length 1161; Best Local Similarity 28.2%; Pred. No. 7.4e-09; Matches 66; Conservative 42; Mismatches 96; Indels 30; Gaps
                                                                                                  316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSTQHEMSQEGFSSALSMD 364
                                                                                                                                               174 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 227
                                                                                                                                                                                                  259 TDGQKFRDPLEYRHVIPBAEKA---GIIRVAIGVGDAFREPTALQELNTIGSAPSQDHVF 315
                                                                                                                                                                                                                                          123 TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 173
                                                                                                                                                                                                                                                                                                       204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                       144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                                  69 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 122
                                                                                                                                                                                                                                                                                                                                                                                                                                          11 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 68
                                                                                                                                                                                                                                                                                                                                                                                                             203
```

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run on:
                     222222211111111 98
2222222111111111 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score
               1536
1536
1536
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
15336
153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0 seq length: 2000000000
               100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Published Applications AA Main:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_27_321
1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          December 14, 2005, 11:18:07 ; Search time 88.8744 Seconds (without alignments) 1386.897 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1867569 seqs, 417829326 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GQGGRREDGGPACYGGFDLY.....GLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
               GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멂
                                    SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1867569
Sequence 2, Appli
Sequence 621, App
Sequence 187, App
Sequence 199, App
Sequence 1823, App
Sequence 187, App
Sequence 187, App
Sequence 187, App
Sequence 232, App
Sequence 232, App
Sequence 187, App
Sequence 6, Appli
Sequence 18, Appl
Sequence 18, Appl
Sequence 18, Appl
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 24, Appli
Sequence 24, Appli
Sequence 24, Appli
Sequence 24, Appli
Sequence 27, Appli
Sequence 27, Appli
Sequence 27, Appli
Sequence 28, Appli
Sequence 29, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Description
                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                       S
                                                                                                                                                                                           밁
                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1
US-11-047-278-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-11-047-278-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/11047278
Publication No. US20050196407A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 368
TYPE: PRT
ORGANISM: Homo sapiens
                                                                            267
                                                                                                                                 241
                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                147
                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  295;
                                                                                                                                                                                                                                                                                                                                                                                                                                 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                            LNEXPESVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                        LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                             ALQGIIHSILKKSCIBILAABPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                              ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                                                                                                              TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GOGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                              ALQGI I HSILKKSCIEILAAEPSTI CAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>.</u>.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ALIGNMENTS
```

<b>4</b> 4 5	44	43	42	41	40	39	38	37	36	ω G	ω 4	ω u	32	31	30	29	28
1054	1064	1178	1305.5	1419	1479	1479	1490	1490	1500	1500	1500	1500	1505.5	1505.5	1507	1507	1519
68.6	69.3	76.7	85.0	92.4	96.3	96.3	97.0	97.0	97.7	97.7	97.7	97.7	98.0	98.0	98.1	98.1	98.9
460	460	479	504	529	534	534	543	543	543	543	543	543	342	342	328	328	562
4.	4	4.	4	4	4	4	4	4	4	4.	4.	4	4	4.	4	4.	ហ
US-10-201-292-30	US-10-201-292-28	US-10-201-292-32	US-10-201-292-34	US-10-201-292-36	US-10-201-292-12	US-10-038-307-12	US-10-201-292-10	US-10-038-307-10	US-10-201-292-16	US-10-201-292-14	US-10-038-307-16	US-10-038-307-14	US-10-201-292-22	US-10-038-307-22	US-10-201-292-26	US-10-038-307-26	US-10-979-159-301
Sequence 30, Appl	Sequence 28, Appl	Sequence 32, Appl	Sequence 34, Appl	Sequence 36, Appl	-	Sequence 12, Appl	•	•	Sequence 16, Appl	Sequence 14, Appl	Sequence 16, Appl	Sequence 14, Appl	Sequence 22, Appl	Sequence 22, Appl	Sequence 26, Appl	Sequence 26, Appl	Sequence 301, App

```
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 96296.97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
FRIOR APPLICATION NUMBER: US/99/970,076
PRIOR FILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR PILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2
                         Query Match 100.0%; Score 1536; DB 6 Best Local Similarity 100.0%; Pred. No. 7e-149;
Mismatches
                                                         DB 6;
0
```

Length 368; Indels

0;

Gaps

0

120

86 60

180 206

146

295

```
CURRENT APPLICATION NUMBER: US/09/833,245
CURRENT FILING DATE: 2001-04-12
PRIOR APPLICATION NUMBER: 60/229, 358
PRIOR FILING DATE: 2000-04-12
PRIOR FILING DATE: 2000-04-12
PRIOR FILING DATE: 2000-02-6, 931
PRIOR FILING DATE: 2000-12-6
PRIOR FILING DATE: 2000-12-6
VALUE OF THE OF SEQ ID NOS: 2267
SOFTWARE: PATENTIN VET. 2.1
SEQ ID NO 621
                                           APPLICANT: Brad St. Croix
APPLICANT: Beat Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107.00134
CURRENT PILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/22,599
PRIOR APPLICATION NUMBER: 60/22,599
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR APPLICATION NUMBER: 60/24,360
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR PILING DATE: 2000-04-11
NUMBER OF SEG ID NOS: 358
SOFTWARE: FASTSEQ for Windows Version 3.0
SEG ID NO 187
                                                                                                                                                                                                                                                                                                                                        US-09-918-715-187; Sequence 187, Application US/09918715; Publication No. US20030017157A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: PRT; ORGANISM: Homo sapiens US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 295; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 621, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Pusion Proteins
FILE REFERENCE: PF546PCT
                 LENGTH: 56
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 403
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            147
                                                                                                                                                                                                                                                                                                                                                                                                                                            267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241 LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GQGGRREDGGÞACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GQGGRREDGGPACYGGPDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                            LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/09833245 o. US20040010134A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1536; DB 3
Pred. No. 8e-149;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 3;
                                                                                                                                                                                                                                                          PATTERNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      403;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뭕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                           á
                                                                                   밁
                                                                                                                   Ś
                                                                                                                                                      밁
                                                                                                                                                                                  á
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                         Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 295;
                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       207
                                                    181
                                                                                     147
                                                                                                                     121
                                                                                                                                                                                                                                                                                         295;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                        87
                                                                                                                                                                                                                        27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27
```

```
Sequence 232, Application US/09918715

Publication No. US20030017157A1

GENERAL INFORMATION:
APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
ITILE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134

CURRENT APPLICATION NUMBER: US/09/918,715

CURRENT FILING DATE: 2001-08-01

PRIOR APPLICATION NUMBER: 60/222,599

PRIOR FILING DATE: 2000-08-02

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR FILING DATE: 2000-08-11

PRIOR FILING DATE: 2000-08-11

PRIOR FILING DATE: 2000-04-11

NUMBER OF SEQ ID NOS: 358

SOCTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 232

LENGTH: 564

TYPE: PRT
ORGANISM: Homo sapiens

US-09-918-715-232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 4
US-09-918-715-232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-918-715-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                 61 TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                 1 GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                       h 100.0%; Score 1536; DB 3; Similarity 100.0%; Pred. No. 1.3e-148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                     GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TRGTTLMXLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                           ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                              ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                    ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                         TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1536; DB 3;
Pred. No. 1.3e-148;
                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                     <u>.</u>.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               Length 564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                             180
                                                                                                                                                                                            146
                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                       86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                 240
                                                                                              206
    266
                                                                                                                                                                                                                                                                                                                                                                                     0
```

S

```
RESULT 6
US-10-408-765A-1823
US-10-408-765A-1823
Sequence 1823, Application US/10408765A
Publication No. US20040101874A1
GENERAL INFORMATION:
APPLICANT: Ghosh, Soumitra S.
APPLICANT: Fahy, Eoin D.
APPLICANT: Tang, Bing
APPLICANT: Gibson, Bradford W.
APPLICANT: Taylor, Steven W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Millennette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Monahan, John E.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: MILLENTION: OSTITIONS, KITS, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, AND
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
US-10-301-822-199
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT ; ORGANISM: Homo Sapiens US-10-301-822-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 199, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                  267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           295;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQ 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GQGGRREDGGPACYGGPDLYFILDXSGSVLHHMNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                  LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/10301822 o. US20030148410A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 1536; DB 4; ilarity 100.0%; Pred. No. 1.3e-148; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
```

```
APPLICANT: CARSON-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Vogelstein, Bert
APPLICANT: Vinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR PILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 187
LENGTH: 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 7
US-10-474-794-187
 밁
                                   S
                                                                                                                                                ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-474-794-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-408-765A-1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Glenn, Gary M.
APPLICANT: Warnock, Dale B.
APPLICANT: Warnock, Dale B.
TITLE OF INVENTION: TARGETS FOR THERAPEUTIC INTERVENTION
TITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME
FILE REFERENCE: 660088.465
CURRENT APPLICATION NUMBER: US/10/408,765A
CURRENT FILING DATE: 2003-04-04
NUMBER OF SEQ ID NOS: 3077
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 187, Applic Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 1536; DB 4; Best Local Similarity 100.0%; Pred. No. 1.3e-148; Matches 295; Conservative 0; Mismatches 0;
                                                                          Matches
                                                                                                         Query Match
                                                                                           Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQ
                                                                        295;
 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27
                                                                                           Similarity
LNEXPESVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALQGIHSILKKSCIBILAABPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/10474794
5. US20040213793A1
                                                                          Conservative
                                                                                           100.0%;
                                                                          0
                                                                        Score 1536; DB 4;
Pred. No. 1.3e-148;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                         Length
                                                                                                               564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
   86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                            0
```

```
RESULT 8
US-10-474-794-232
Conuence 232, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER: 607 SEQ ID NOS: 359
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 232
LENGTH: 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                    US-10-979-159-187
Sequence 187, Application US/10979159
Publication No. US20050142138A1
GENERAL INFORMATION:
                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-474-794-232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                          RESULT 9
                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 232, Application US/10474794
Publication No. US20040213793A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Carson-Walter, Eleanor APPLICANT: St. Croix, Brad
  APPLICANT: Brad St. Croix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           147
                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                207
                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                       147
                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                            267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      295;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                             87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                ALQGIIHSILKKSCIBILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ALTDGELHEDLFFYSERBANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                     LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS 295
                                                                                                                                                                                                                                                                                                                                                                                              ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ 180
                                                                                                                                                                                                                                                                                                                                                                                                                                           TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                   ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                       ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                               LNEKPESVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1536; DB 4;
Pred. No. 1.3e-148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 146
                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                       206
                                                                                                                                                                                                                                                                                                                                                                                                                                             146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                     266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                        GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Bert Vogelstein

APPLICANT: Bert Vogelstein

APPLICANT: Kenneth Kinzler

TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT

FILE REFERENCE: 1107.00134

CURRENT APPLICATION NUMBER: US/10/979,159

CURRENT FILING DATE: 2004-11-03

PRIOR APPLICATION NUMBER: US/09/918,715

PRIOR FILING DATE: 2001-08-01

PRIOR APPLICATION NUMBER: 60/222,599

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR FILING DATE: 2000-08-12

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR FILING DATE: 2000-08-11

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR APPLICATION NUMBER: 60/282,850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAY
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/10/979,159
CURRENT APPLICATION NUMBER: US/09/918,715
PRIOR APPLICATION NUMBER: US/09/918,715
PRIOR APPLICATION NUMBER: US/09/918,715
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-01
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 10
US-10-979-159-232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
NUMBER OF SEQ ID NOS: 358
SOFTWARE: PastSEQ for Win
SEQ ID NO 232
LENGTH: 564
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ) ORGANISM: Homo sapiens US-10-979-159-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOPTWARE: PastSEQ for Windows Version
SEQ ID NO 187
LENGTH: 564
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match

Best Local Similarity

Matches 295; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 232, Appublication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       87 TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ALQGI IHSILKKSCI EILAAEPSTI CAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/10979159
5. US20050142138A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 1536; DB 5; ilarity 100.0%; Pred. No. 1.3e-148; Conservative 0; Mismatches 0;
                                                                                          for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PATTERNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

Gaps

US-10-979-159-232

```
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296, 97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: Patentin Ver. 2.1
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: PRI
                                                         문
                                                                                                                  ş
                                                                                                                                                                                  밁
                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                              ई
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo Bapiens
US-11-047-278-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 11
US-11-047-278-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6, Application US/11047278 Publication No. US20050196407A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                               191
                                                                                                                                                                                  147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     147
   241
                                                            207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             295;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                295;
                                                                                                                                                                                                                                                                                                           87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                    27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27
   LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS 295
                                                                                               ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                 TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                     ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ 206
                                                                                                                                                                                                                        ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQ 180
                                                                                                                                                                                                                                                                                                           TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                    GOGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                            ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 1536; DB 6; ilarity 100.0%; Pred. No. 1.3e-148; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 1536; DB 5; 100.0%; Pred. No. 1.3e-148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321
                                                                                                                                                                                                                                                                                                           146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       86
                                                               266
                                                                                                                                                                                                                                                                                                                                                                                                                                    86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

```
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FRANCEO for Windows Version 4.0
SEQ ID NO 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Publication MV. C. GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: GOKAYNAK
APPLICANT: GOKAYNAK
APPLICANT: GOKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION UMUMBER: US/10/038,307
CURRENT APPLICATION UMUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
CURRENT SEQ ID NOS: 26
                                                          LENGTH: 551
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-201-292-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-201-292-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-038-307-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-038-307-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Sim
Matches 294;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 18
                                                                                                                                                                                                                                                                                                                                                            Sequence 18, Application US/10201292 Publication No. US20030144193A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18, Application US/10038307
Publication No. US20030134786A1
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 551
TYPE: PRT
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181 ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GOGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
  99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99.7%; Score 1532; DB 4; 100.0%; Pred. No. 3.3e-148; tive 0; Mismatches 0;
Score 1532; DB 4;
Pred. No. 3.3e-148
                                                                                                                                                                                                                                                               216 Compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                               and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   206
```

> 240 206

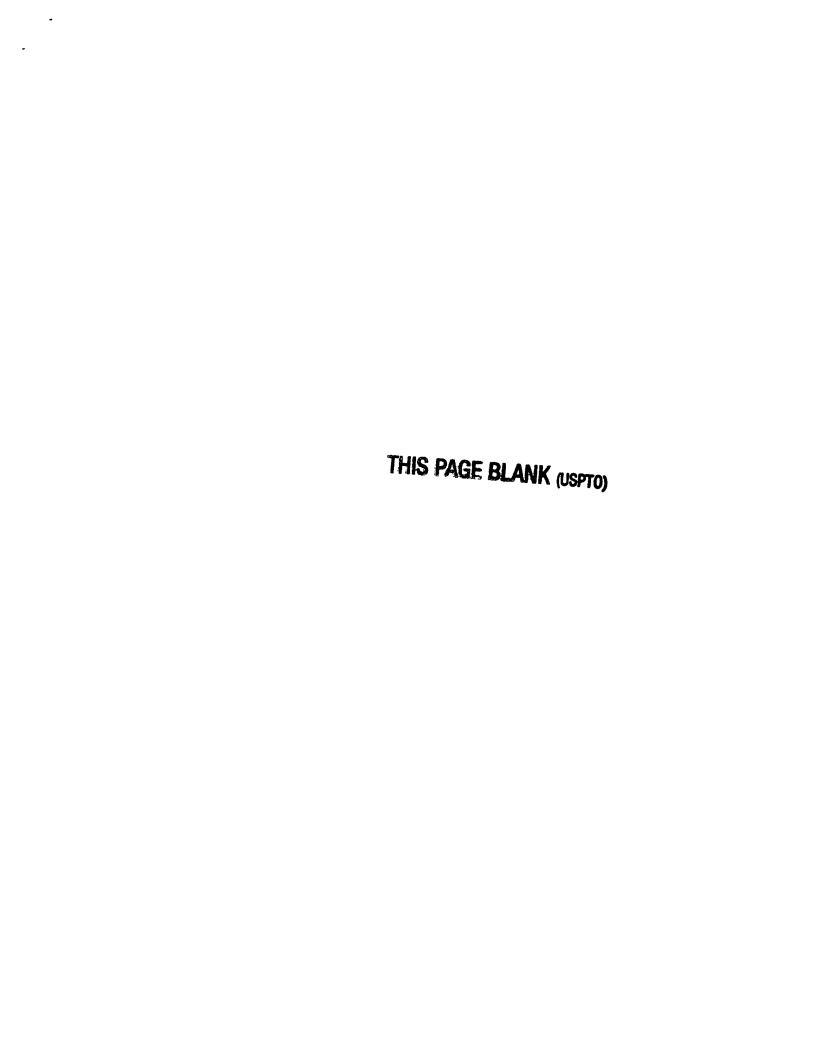
```
Query Match
Best Local Similarity
Matches 293; Conserve
                                                                                                                                                                                                                    US-09-833-245-620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn
SEQ ID NO 620
LENGTH: 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 620, Applic publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                            NAME/KEY: SITE
LOCATION: (320)
OTHER INFORMATION: Xaa e
NAME/KEY: SITE
LOCATION: (331)
OTHER INFORMATION: Xaa e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: PF546PCT
CURRENT APPLICATION NUMBER: US/09/833,245
CURRENT FILING DATE: 2001-04-12
PRIOR APPLICATION NUMBER: 60/229, 358
PRIOR FILING DATE: 2000-04-12
PRIOR APPLICATION NUMBER: 60/256, 931
PRIOR FILING DATE: 2000-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -09-833-245-620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2000-04-25
NUMBER OF SEQ ID NOS: 2267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Proteins
                                                                                                                                                                                                                                    OTHER INFORMATION: Xaa
                                                                                                                                                                                                                                               NAME/KEY: SITE
LOCATION: (368)
                                                                                                                                                                                                                                                                                                                                                                        LOCATION: (175)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: SITE
LOCATION: (175)
                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/199, 384 FILING DATE: 2000-04-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQ
 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27
                              87
                                                         5
                                                                                          27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          294;
                                                                                                                          \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ALQGIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GOGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ 180
                                                                                                                          GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ALTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                             TRGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVII 120
                                                                                           GOGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/09833245
o. US20040010134A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ver.
                                                                                                                                                                                                                                                                                                                                                                         Xaa
                                                                                                                                                                     99.2%;
                                                                                                                                                                                                                                  equals any of the naturally occurring
                                                                                                                                                                                                                                                                              equals
                                                                                                                                                                                                                                                                                                                                                                        equals
                                                                                                                                                                                                                                                                                                                           equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>.</u>
                                                                                                                                                       0
                                                                                                                                                                                                                                                                               any
                                                                                                                                                                                                                                                                                                                                                                         any
                                                                                                                                                                     Score 1524; DB 3; Pred. No. 1.4e-147;
                                                                                                                                                                                                                                                                                                                            any of the
                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                              of the naturally occurring
                                                                                                                                                                                                                                                                                                                                                                        of the naturally occurring L-amino
                                                                                                                                                                                                                                                                                                                            naturally occurring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>,,</u>
                                                                                                                                                                                    Length 403;
                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                    L-amino
                                                                                                                                                                                                                                                                               L-amino
                                                                                                                                                                                                                                                                                                                            L-amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ٥,
                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                            acids
                                                                                                                                                                                                                                                                               acids
                                                                                                                                                                                                                                                                                                                                                                         acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             86
                              146
                                                                                           98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
US-09-796-753-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 12, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION
                                                                                                                                                                     PRIOR PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                                                               PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
              R FILING DATE: 2000-06
R APPLICATION NUMBER:
R FILING DATE: 2000-06
R APPLICATION NUMBER:
R FILING DATE: 2000-09
                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 2000-C APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 09/
FILING DATE: 1999-12-29
APPLICATION NUMBER: 09/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1999-(APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 09/312,359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 09/224,246
FILING DATE: 1998-12-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 2000-
                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 2000-0
                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1999-09-30
APPLICATION NUMBER: 09/471,179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1999-0
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 1998-
                                                                                           APPLICATION NUMBER:
                                                                                                                          FILING DATE: 2000-0
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 2000-0
                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            147 ALTDGELHEDLFFYSEREANRSRDLGAIXYCVGVKDFNETQLARIADSKDHVFPVNDGFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 2001-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALQGIIHSILKKSCIBILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDXS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ALQGI I HSILKKSCI EI LAAEPSTI CAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         McCarthy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/09796753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US20030027998A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7853-227-999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1999-06-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1999-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1999-05-14
                                                                                                                                                                                                                                                                                              1999-12-29
                                                                                                                                                                                                                                                                                                                                                           1999-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                        1999-09-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1999-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-12-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-12-30
                                                                                                                                        2000-06-
                                                                                                                                                                     2000-06-19
                                                                                                                                                                                                                                    2000-03-0
                                                                                                                                                                                                                                                                  2000-02-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1999-06-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1999-02-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-10-30
                                                                           2000-06-
                                                                                                           2000-07-3
                                                                                                                                                                                                     2000-05-14
                                              2000-06-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SECRETED PROTEINS AND USES THEREOF
                   2000-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001-03-01
                                                                                                                          09/630,334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09/183,175
                                                           09/606,317
                                                                                                                                                       09/599,596
                                                                                                                                                                                                                                                                                                                                                                                                      09/409,634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/122,458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09/223,094
                              09/665,666
                                                                                                                                                                                       09/597,993
                                                                                                                                                                                                                  09/572,002
                                                                                                                                                                                                                                                  09/516,745
                                                                                                                                                                                                                                                                                 09/514,010
                                                                                                                                                                                                                                                                                                            09/474,072
                                                                                                                                                                                                                                                                                                                                              09/474,071
                                                                                                                                                                                                                                                                                                                                                                                                                                       09/399,723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09/365,164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09/345,464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09/342,687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09/336,536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09/259,388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09/223,546
                                                                                           09/606,565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/09/796,753
```

밁 á 밁 Ś 밁 δ 밁 á 밁 S

Ş 밁 S 밁

S

```
; PRIOR FILING DATE: 2000-09-30; NUMBER OF SEQ ID NOS: 162; SEQ ID NO 12; LENGTH: 333; TYPE: PRT; ORGANISM: Homo Bapiens US-09-796-753-12
Search completed: December 14, 2005, 11:58:59 Job time : 90.0411 secs
                                   밁
                                              ঠ
                                                              밁
                                                                               Ş
                                                                                                 문
                                                                                                                  Ş
                                                                                                                                    밁
                                                                                                                                                     Ş
                                                                                                                                                                          밁
                                                                                                                                                                                        Ş
                                                                                                                                                                                                           Query Match 99.0%; Score 1520; DB 3; Length 333; Best Local Similarity 100.0%; Pred. No. 2.7e-147; Matches 292; Conservative 0; Mismatches 0; Indels (
                                 181 ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT 240
                                                                                                    27
                                                                                                                                                                        ٥,
                                                                                                                                                                                                            Gaps
                                                                                                                                                                          86
                                                                                                                                                                                           60
                                                                                                                                                                                                            0
```



```
Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB seg length: 0
Maximum DB seg length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                       Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                         Published Applications AA_New:*

1: /cgn2_6/ptodata/1/pubpaa/USO9_NEW_PUB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/USO7_NEW_PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/USO7_NEW_PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/USO7_NEW_PUB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/USO7_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/USIO_NEW_PUB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/USIO_NEW_PUB.pep:*

8: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          51441 seqs, 6734002 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-2_COPY_27_321
1536
1 GQGGRREDGGPACYGGFDLY.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       December 14, 2005, 11:18:48; Search time 4.33534 Seconds (without alignments)
458.218 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GQGGRREDGGPACYGGFDLY.....GLSFISSSVIITTTHCSDGS 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          51441
```

## SUMMARIES

25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	σ	ហ	4	w	N	ם	Regult No.	,
95.5	95.5	99.5	100	103.5	104.5	104.5	104.5	107	107	107	107	107	110.5	111	111	111	113.5	113.5	113.5	113.5	113.5	131	145.5	1536	Score	
	6.2															7.2	7.4	7.4	7.4	7.4	7.4	8.5	9.5	100.0	Query	*
1196	1179	182	678	182	1019	918	828	1188	1188	1188	1166	1141	761	1188	1166	1141	956	915	798	764	739	3063	1152	564	Length	
σ.	٠,	D	7	σ	თ	σ	σ	7	7	σ	თ	0	7	თ	თ	ტ	7	σ	თ	7				7	8	
-10-995	-11-097-125-	0-601-368-	-11-102-	US-10-601-368-25	1	US-10-995-561-981		US-11-000-463-810	US-11-000-463-338	US-10-601-368-3	US-10-601-368-4	US-10-601-368-6	US-11-057-047-6	US-10-601-368-21	US-10-601-368-22	US-10-601-368-24	US-11-113-424-39	US-10-131-826A-294	US-10-821-234-1034	US-11-057-047-1	US-11-057-047-2	US-11-186-284-26	US-11-080-026-4	US-11-186-284-199	ID	
921	٠.		34	e 25,	e 982,	e 981,	e 983,	æ	e 338,	Sequence 3, Appli	4	6	Sequence 6, Appli	e 21	e 22		Sequence 39, Appl	Sequence 294, App	e 103	Sequence 1, Appli	Sequence 2, Appli	26	Sequence 4, Appli	Sequence 199, App	Description	

음 성 음

S

음 성	3 m Q	RESULT US-11- Sequence Publi GENE App App App App App App App App App Ap		
	Query M Best Lo Matches	SULT 1  Sequence 199, Applic Publication No. US20 GENERAL INFORMATION: APPLICANT: Millenni APPLICANT: Guillem APPLICANT: Kamatka APPLICANT: Kamatka APPLICANT: MODATE:		444444333333226 444449336543211
	y Match Local Si hes 295	LT 1 1-186-284-195 lication No. blication No. bplicant: No. bplicant: Be pplicant: Se pplicant: Me pplicant: Me pplicant: Me pplicant: Me pplicant: Me pplicant: Me pplicant: Me pplicant: Me pplicant: Me pplicant: Me pplicant: Me pplicant: Me pplicant: Me pplicant: Me UTRENT APPLICA RIOR FILING I RIOR FILING I RIOR APPLICAN RIOR APPLICAN RIOR APPLICAN RIOR APPLICAN RIOR APPLICAN RIOR APPLICAN RIOR FILING I RIOR FILING I RIOR APPLICAN RIOR APPLICAN RIOR PILING I RIOR APPLICAN		J JJJJJJ 10
1 ( 27 (	295	284-1 100 N 11NFOR NT: NT: NT: NT: NT: NT: NT: NT: NT: NT:		95 94 94 94 95 91 91 82 91 77 77 77 77 77 78 77 78 78 79 79 79 79 79 79 79 79 79 79 79 79 79
6-6 6-6 6-6	i g	Apply No. 1  No. 1  No. 1  Berry  Guill  Merry  Guill  Monn  Thill  Burry  Guill  Monn  Thill  Carli  Carli  CCATIL  C		
RREI	Similarity 5; Conser	4-199 99, Application No. US2005(FORMATION: Millennium Berger, Millennium Berger, Millemett Kamatkar, Schlegel, Monahan, Homonahan,		0.000000000000000000000000000000000000
8—8 —8 —8	100.0 ilarity 100.0 Conservative	99 Application US/1118 o. US20050266493A1 MATION: illennium Pharmaceut Berger, Allison Guillemette, Tracy L Kamatkar, Shubhangi Schlegel, Robert Monahan, John E. Thibodeau, Stephen N Thibodeau, Stephen N Thibodeau, Stephen J Burgart, Lawrence J ENTION: NOVEL GENES, ENTION: METHAPY OF CE: MEMO1-029PENM ICATION NUMBER: US/10/ DATE: 2002-01-12-10 ATION NUMBER: US/10/ DATE: 2001-12-10 DATE: 2001-12-10 DATE: 2001-12-10 DATE: 2002-03-05 ATION NUMBER: US 60/ DATE: 2002-03-05 DATE: 2002-05-20 Q ID NOS: 228 stSEQ for Windows Ve stSEQ for Windows Ve		
CYG-CYG	100 100 :ive	ion US/11 0266493A1 Pharmace 11ison te, Tracy Shubhang Robert John E. , Stepher Lawrence OVEL GENN METHODS I METHODS I METHODS I METHODS I METHODS I 0205-07 BER: US/1 02-11-21 03-11-21 01-12-10 01-12-1		1167 353 448 627 1167 1167 11062 11062 31004 904 915 415 436 1798 1798 1798 1798 117
GFDL GFDL	. 0 %	SS/11 93A1 nace racy racy racy racy racy racy racy racy		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Y — Y — Y — I — I — I — I — I — I — I —	0	x 3 3 3 1 C · · · · 6	*	
DKS	Score Pred. Misn	284 20MPP COMPP DENVILOR 11, 9, 9, 9, 11, 9, 9, 11, 9, 9, 11, 9,	ALIGNMENTS	11-09 11-13 10-46 10-60 10-51 11-13 11-13 11-50 10-59 10-79 10-99 10-99 10-99 10-99
77. 	ore 1536; ed. No. 1 Mismatche	, Inc SSITI THEIC CANC CANC 171 71 71	MEN	9993-633-7-623-7-4-4-1
HH HH	m·	CORTIONS	TS	114655-2 4655
21 T	DB 7 3e-13	284  cals, Inc.  Compositions, KI IDENTIFICATION, COLON CANCER  /186,284  01,822  39,971  61,978  81,988  81,988		\$11-097-125-2 \$11-137-465-44 \$11-137-465-43 \$11-137-465-43 \$10-601-368-18 \$11-137-465-43 \$11-137-465-43 \$11-513-786-2 \$10-513-786-2 \$10-513-786-1 \$10-793-626-1040 \$10-763-712A-25 \$10-763-712A-25 \$10-95-561-1034 \$10-95-561-1034 \$10-95-561-1034 \$10-95-561-1034 \$10-95-561-1034 \$10-510-186-158 \$10-793-626-2880 \$10-793-626-2880 \$10-999-886-3
FVE HVE	US 	кітs, , assi		
F = F	Lengt Indel	ASSESSMENT		
GQGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFS 	th 5	ENT,		
PQLR PQLR	64; 0;	PRE		Sequence sequence
MSF1		VEN		
VFS	Gaps	PREVENTION,		2, Appli 44, Appl 45, Appl 45, Appl 18, Appli 18, Appli 10, Appli 10, Appli 103, Appli 103, Appli 103, Appli 103, Appli 103, Appli 103, Appli 103, Appli 103, Appli 103, Appli 103, Appli 103, Appli 103, Appli 103, Appli
96	0	AND		
	••			

```
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals, IT
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Thibodeau, Stephen N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 2
US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                              US-11-186-284-26; Sequence 26, Application US/11186284; Publication No. US20050266493A1
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: HOMO
US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: MODIFIED POLYPEPTIDES ST
TITLE OF INVENTION: DESIRED CONFORMATION AN
PILE REFERENCE: CFBF-P02-021
CURRENT APPLICATION NUMBER: US/11/080,026
CURRENT FILING DATE: 2005-03-15
PRIOR APPLICATION NUMBER: 09/945,265
PRIOR TILING DATE: 2001-08-31
PRIOR APPLICATION NUMBER: US 60/229,700
PRIOR FILING DATE: 2000-09-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 4, Application US/11080026 Publication No. US20050260192A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
LENGTH: 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Springer, Timothy A. APPLICANT: Shimaoka, Motomu APPLICANT: Lu, Chafen
      APPLICANT: Burgart TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                             175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          147
                                                                                                                                                                                                                                                                                                                                                                                  315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               124 DGELHEDLFFYSE--REANRSRDLGAIVYCVGVKDFNETQLAR----IADS--KDHVFP 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           200 FTFKEFQNNPNPRSLVKPITQLL--GRTHTATGIRKVVRELFNITNGARKNAFKILVVIT 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 150 DIAFLIDGSGSIIPHDFRRMKEFVST-----VMEQLKKSKTLFS-----LMQYSEEFRIH 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18 DLYFILDKSGSVL-HHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTED----

    T: Thibodeau, Stephen N.
    T: Burgart, Lawrence J.
    INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT,

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALQGIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVT
                                                                                                                                                                                                                                                                                                                                                                                                                         VNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHA 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ------REQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALT 123
                                                                                                                                                                                                                                                                                                                                                                                  VNN-FEALKTIQNQLREK----IFAIEGTQTGSSSSFEHEMSQEGFSAA 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DGEKFGDPLGYEDVIPEADRE---GVIRYVIGVGDAFRSEKSRQELNTIASKPPRDHVFQ 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LNEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9.5%; Score 145.5; DB 7;
26.2%; Pred. No. 1.1e-05;
ative 45; Mismatches 81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STABILIZED :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1152;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IN A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRODUCING SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     43;
           PREVENTION, AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               206
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-11-186-284-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR PILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR PILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR PILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
                                                                                                US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-11-057-047-2
                                                                                                                                                             SUFINE 2
; SEQ ID NO 2
FURTH: 739
                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR FILING DATE: 2004-12-14
PRIOR FILING DATE: 2004-05-13
PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin version 3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 26
LENGTH: 3063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2, Application US/11057047 Publication No. US20050260198A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 8.5%; Score 131; DB 7; Best Local Similarity 29.8%; Pred. No. 0.00099;
                     Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Holers, Vernon
APPLICANT: Thurman, Joshua
APPLICANT: Taube, Christian
APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, 7
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: THERAPY OF COLON CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: MPM01-029P2RNM
                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 440 DIVFLVDGSYSIGIANFVKVRAFLEVLVKSFEISPNRVQISLVQYSRDPHTEFTLKKFTK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     609 SFELTQSICLRIEQELAA 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                186 IHSILKKSCIEI --- LAA 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              553 SSDAF---RDPAIKLRNSDVEIFAVGVKDAVRSELEAIASPPAETHVFTVED-FDAFORI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          128 HEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIAD--SKDHVFPVNDGFQALQGI 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        500 VEDII-----EAINTFPYRGGSTNTGKAMTYVREKIFVPSK-GSRSNVPKVMILITDGK-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   72 DREQIRQGLEELQKVLP--GGDTYMHEGFERASEQIYYENRQGYRT--ASVIIALTDGEL 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFST---RGTTLMKLTE
h 7.4%; Score 113.5; DB
Similarity 19.6%; Pred. No. 0.006;
66; Conservative 63; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             38; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 7; Length 3063;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The Alternative Complement Pathway
                                                DB 7;
       109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                  Length 739;
    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26;
    99;
       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
         17
```

and

Matches

66;

```
APPLICANT: Thurman, Joshua
APPLICANT: Taube, Christian
APPLICANT: Gelfand, Erwin
APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
ITILE OF INVENTION: Inhibition of Factor B, The Alt
ITILE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: US/11/057,047
PRIOR FILING DATE: 2004-02-13
PRIOR FILING DATE: 2004-05-13
NUMBER: US/10/15040
PRIOR FILING DATE: 2004-05-13
NUMBER: OF SEQ ID NOS: 6
SOFTMARE: Patentin version 3.3
SEQ ID NO 1
LENGTH: 764
Type: PRT
ORGANISM: Homo sapiens
                  Ś
                                                      밁
                                                                                       ફ
                                                                                                                          밁
                                                                                                                                                       ঠ
                                                                                                                                                                                              문
                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 5
US-11-057-047-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/11057047 Publication No. US20050260198A1
                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Holers, Vernon APPLICANT: Thurman, Josh APPLICANT: Taube, Christ
                                                                                                                                                                                                                                                                                  Local Similarity 19.6%;
                     137
                                                                                                                          303
                                                                                                                                                                                                243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       331
                                                      356 -KKALQAVYSMMSWPDDVPPEGWNRTRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             278
                                                                                                                                                             46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98
                                                                                                                                                                                                                               2 QGGRREDG-GPA------CYGGFDLYFILDKSGSV-----LHHWNEIYYFVEQLAH
                                                                                                                        YGVKP--RYGLVTYATYPKIWVKVSEADSSNADWVTKQLNEINYEDHKLKSGTNT-----
REANRSRDLGAIVYCVG--VKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                           KFISPQLRMSFIVFSTRGTTLMKLTE----DREQIRQGLEEL----QKVLPGGDTYMHEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YGVKP--RYGLVTYATYPKIWVKVSEADSSNADWVTKQLNEINYEDHKLKSGTNT---- 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KFISPQLRMSFIVFSTRGTTLMKLTE----DREQIRQGLEEL----QKVLPGGDTYMHEG
                                                                                                                                                                                              EGVDAEDGHGPGEQQKRKIVLDPSGSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKVAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ----QSLSLC----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IEILAAEPSTICAGESFOVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RKNPREDYLDVYVFGVGPLVNQVNINALASKKDNEQHVFKVKD-MENLEDVFYQMIDES-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -KKALQAVYSMMSWPDDVPPEGWNRTRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EGVDAEDGHGPGEQQKRKIVLDPSGSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKVAS 277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QGGRREDG-GPA-----CYGGFDLYFILDKSGSV-----LHHWNEIYYFVEQLAH
                                                                                    PERASEQIYYENR-----QGY-RTASVIIALTDG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REANRSRDLGAIVYCVG--VKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FERASEQIYYENR------QGY-RTASVIIALTDG------ELHEDLFFYSE 136
                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            · IRPSKGHESCMG-----AVVSEYFVLTAAHC
                                                                                                                                                                                                                                                                 63;
                                                                                                                                                                                                                                                                                  Score 113.5; DB Pred. No. 0.0062;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -GMVWEHRKGTD------YHKQPWQAKISV-- 476
                                                                                                                                                                                                                                                                 Mismatches 109;
                                                                                                                                                                                                                                                                                                DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alternative Complement Pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            502
                                                                                                                                                                                                                                                                                                Length 764;
                                                                                                                                                                                                                                                                 Indels
                                                                                       ----ELHEDLFFYSE 136
                                                                                                                                                                                                                                                                 99;
                                                                                                                                                                                                                                                                 Gaps
                    194
                                                                                                                                                                                                                               45
                                                     414
                                                                                                                          355
                                                                                                                                                             97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                45
                                                                                                                                         RESULT 7
US-10-131-826A-294
                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maure,
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Elle
                                                                                    Sequence 294, Application US/10131826A Publication No. US20050245730A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Labat,
APPLICANT: Stache
APPLICANT: Andarr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                       449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  415 RKNPREDYLDVYVFGVGPLVNQVNINALASKKDNEQHVFKVKD-MENLEDVFYQMIDES-
 Desnoyers, Luc
Filvaroff, Ellen
                                                   Beresini, Maureen
```

```
FILE REFERENCE: 821A
CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR FILING DATE: 2003-04-07
NUMBER OF SEQ ID NOS: 1704
SOPTWARE: pt SEQ_genes Version 1.0
SEQ ID NO 1034
LENGTH: 798
TYPE: PRT
ORGANISM: Homo sapiens
US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1034, Application US/10821234 Publication No. US20050255114A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / Match 7.4%; Score 113.5; DB 6; Local Similarity 19.6%; Pred. No. 0.0066; 196 66; Conservative 63; Mismatches 109;
                                                                                                                                                                                                                                                                                                                                 390 -KKALQAVYSMMSWPDDVPPEGWNRTRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKD
                                                                                                                                                                                                                                                                                                                                                                                                                                           337 YGVKP--RYGLVTYATYPKIWVKVSEADSSNADWVTKQLNEINYEDHKLKSGTNT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              46 KFISPQLRMSFIVFSTRGTTLMKLTE----DREQIRQGLEEL----QKVLPGGDTYMHEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 QGGRREDG-GPA-----CYGGFDLYFILDKSGSV-----LHHWNEIYYFVEQLAH 45
                                                      CPAPILKEVGMKAALQVSMNDGLSFISSSVIITTHC
                                                                                                                                                                                                                                                             REANRSRDLGAIVYCVG---VKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                  FERASEQIYYENR-----QGY-RTASVIIALTDG------ELHEDLFFYSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EGVDAEDGHGPGEQQKRKIVLDPSGSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKVAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHC
                                                                                                            ----QSLSLC--
                                                                                                                                                            IEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLL
                                                                                                                                                                                                                     RKNPREDYLDVYVFGVGPLVNQVNINALASKKDNEQHVFKVKD-MENLEDVFYQMIDES-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLL 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stache-Crain, Birgit
Andarmani, Susan
Tang, Y. Tom
- IRPSKGHESCMG-----AVVSEYFVLTAAHC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IRPSKGHESCMG-----AVVSEYFVLTAAHC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ivan
                                                                                                               GMVWEHRKGTD-
                                                                                                            -----YHKQPWQAKISV--
  561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 798;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -YHKQPWQAKISV--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99;
                                                                                                                                                                                                                                                                                                                                                                                  136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       336
                                                                                                                                                                                                                                                                                                                              448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97
                                                                                                                                                                  254
                                                                                                                                                                                                                                                                                                                                                                                                                                           389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17
```

Gao, Wei-Qiang

```
RESULT 8
US-11-113-424-39
                                                                                                                     á
                                                                                                                                                           밁
                                                                                                                                                                                       Ś
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo US-10-131-826A-294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 550 SEQ ID NO 294
Sequence 39, Application US/11113424
                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3330R1C128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/059588 PRIOR FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059122
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/059263
FILING DATE: 1997-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/059352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1997-09-17
                                                                                                                                                                                          183
                                                                                                                                                                                                                               171
                                                                                                                                                                                                                                                                  125
                                                                                                                                                                                                                                                                                                     114
                                                                                       282
                                                                                                                                                           226
                                                                                                                       238 SVTLNE 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/10/131,826A FILING DATE: 2002-04-24
                                                                                                                                                                                                                                                                                                                                                                        57
                                                                                                                                                                                                                                                                                                                                                                                                           18
                                                                                                                                                                                                                                                                                                                                      70
                                                                                                                                                                                                                                                                                                                                                                                                                                            55;
                                                                                                                                                                                                                                                       GELHEDLFFYSEREANRSRDLGAIVYCVGV--KDFNETQLARIADSKDHVFPVNDGFQAL 182
                                                                                       LCAMED 287
                                                                                                                                                                                                                                                                                                     FKRKSEVERAVKRMRHLSTGTMTGLAIQY---ALNIAFSEAEGARPLRENVPRVIMIVTD
                                                                                                                                                                                                                                                                                                                                                                                                         DLYFILDKSGSV-LHHWNEIYYF-VEQLAHKFISPQL-RMSFIVFSTRGTTL-----MKL
                                                                                                                                                           ETLTSVFQKKLCTAHMCSTLEHNCA--HFCINIPGSYVCRCKQGYILNSDQTTC--RIQD
                                                                                                                                                                                          QGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHAR-----NVDRVLCSFKIND
                                                                                                                                                                                                                               GRPQDSV----AEVAAKARDTGILIFAIGVGQVDFNTLKSIGSEPHEDHVFLVAN-FSQI
                                                                                                                                                                                                                                                                                                                                    TEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYR----TASVIIALTD
                                                                                                                                                                                                                                                                                                                                                                        DLVFIIDSSRSVNTHDYAKVKEFIVDILQFLDIGPDVTRVGLLQY---GSTVKNEFSLKT 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gurney, Austin L. Sherwood, Steven Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Watanabe, Colin K
Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumas,Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stewart, Timothy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goddard, Audrey
Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zemin
                                                                                                                                                                                                                                                                                                                                                                                                                                                           7.4%; Score 113.5; DB 22.4%; Pred. No. 0.008;
                                                                                                                                                                                                                                                                                                                                                                                                                                            53;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                            103;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 915;
                                                                                                                                                                                                                                                                                                                                                                                                                                              35;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                     170
                                                                                                                                                                                                                                                                                                                                       124
                                                                                                                                                                                            237
                                                                                                                                                                                                                                 225
                                                                                                                                                                                                                                                                                                                                                                                                             69
```

```
밁
                                                                                                                                                                                                                                                                                         RESULT 9
US-10-601-368-24
                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo sapiens
US-11-113-424-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 39
LENGTH: 956
TYPE: PRT
                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                    Sequence 24, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Publication No. US20050260713A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local 9
APPLICANT: LOTA, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND PILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR PILING DATE: 2000-04-27
PRIOR PILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2001-05-02
NUMBER OF SEQ ID NOS: 190
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/311,613
PRIOR FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: 60/315,617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2000-12-19
PRIOR APPLICATION NUMBER: 60/311,590
PRIOR FILING DATE: 2001-08-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/11/113,424
CURRENT FILING DATE: 2005-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gangolli et al.
TITLE OF INVENTION: Polypeptides and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 2000-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/257,314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/256,704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 2001-07-24
APPLICATION NUMBER: 60/322,358
FILING DATE: 2001-09-14
APPLICATION NUMBER: 60/294,075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 2001-08-29
APPLICATION NUMBER: 60/307,506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/288,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 2001-05-29
                                                                                                                                                                                                                                                                                                                                                                                                                                      238 SVTLNE 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                183 QGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHAR-----NVDRVLCSFKIND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            171 GRPQDSV----AEVÄAKARDTGILIFAIGVGQVDFNTLKSIGSEPHEDHVFLVAN-FSQI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125 GELHEDLFFYSEREANRSRDLGAIVYCVGV--KDFNETQLARIADSKDHVFPVNDGFQAL 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 114 FKRKSEVERAVKRMRHLSTGTMTGLAIQY---ALNIAFSEAEGARPLRENVPRVIMIVTD 170
                                                                                                                                                                                                                                                                                                                                                                                          282 LCAMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         70 TEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYR-----TASVIIALTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          57 DLVFIIDSSRSVNTHDYAKVKEFIVDILQFLDIGPDVTRVGLLQY---GSTVKNEFSLKT 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18 DLYFILDKSGSV-LHHWNEIYYF-VEQLAHKFISPQL-RMSFIVFSTRGTTL-----MKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ETLTSVFQKKLCTAHMCSTLEHNCA--HFCINIPGSYVCRCKQGYILNSDQTTC--RIQD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                          287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 113.5; DB Pred. No. 0.0085; 3; Mismatches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                  USES
                                                                                                                                                                  THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              956;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   35,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
```

237

281

225

124

```
; SOPTWARE: FASTSEQ for Wir
; SEQ ID NO 24
; LENGTH: 1141
; TYPE: PRT
; ORGANISM: Mus musculus
US-10-601-368-24
용
                                 र्
                                                                              문
                                                                                                                  Ś
                                                                                                                                                          밁
                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Mus musculus
US-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-601-368-22
                                                                                                                                                                                                                                                                                                                        Query Match 7.2%; Score 111; DB 6; Length 1166; Best Local Similarity 24.1%; Pred. No. 0.019; Matches 49; Conservative 28; Mismatches 88; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 40
SOFTWARE: FREESEQ for Windows Version 3.0
SEQ ID NO 22
LENGTH: 1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 22, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: LOTB, JÖBE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT .
FILE REFERENCE: 0734-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR PILING DATE: 2000-04-27
PRIOR PILING DATE: 2000-04-27
PRIOR PILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                      162
                                                                              253
                                                                                                                      128
                                                                                                                                                                                                                                           137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       217
                                                                                                                                                          195 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      335 EAAL---KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49; Conservative
                                                                                                                                                                                                     71
                                                                                                                                                                                                                                                                                   ដ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13 CYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                       CQTYMDIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL-
EAAL---KDIVDALGDRIFSLEG 332
                                      LARIADSKDHVFPVNDGFQALQG 184
                                                                                                                                                                                                                                                                               CYGGFPLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LARIADSKDHVFPVNDGFQALQG 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HDSPDLEKVIRQSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NDYRSVKDVVEAASHIEORGGTETRTAFGIEFARSEAFOKGGRKGAK--KVMIVITDGES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 127
                                                                              HDSPDLEKVIRQSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD 312
                                                                                                                  HED-----FNETQ 161
                                                                                                                                                                                                 EDREOIROGLEELOKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HED-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CQTYMDIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7.2%; Score 111; DB 6
24.1%; Pred. No. 0.019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQ 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 6; Length 1141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THEREOF
                                                                                                                                                          252
                                                                                                                                                                                                                                           194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     274
```

```
TITLE OF INVENTION: Inhibition of Factor B, The Alternative Com
FILE REFERENCE: 2848-66
FURRENT APPLICATION Methods Related Thereto
FURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR PILING DATE: 2004-12-14
PRIOR PILING DATE: 2004-05-13
PRIOR FILING DATE: 2004-05-13
NUMBER: 05 SEQ ID NOS: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-11-057-047-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 6
LENGTH: 761
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Holers, Vernon
APPLICANT: Thurman, Joshus
APPLICANT: Taube, Christia
APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 6, Application US/11057047 Publication No. US20050260198A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 21, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 49; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                            SOFTWARE: PatentIn version 3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF FILE REFERENCE: 07334-275001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY: SIGNAL
LOCATION: (1)...(22)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 1188
TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            y Match 7.2%;
Local Similarity 24.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                217 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    162 LARIADSKDHVFPVNDGFQALQG 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        71 EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13. CYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EAAL---KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HDSPDLEKVIRQSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COTYMDIVIVLOGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL- 216
                                                                                                                                                                                                                                                                                                                                                                                Gelfand, Erwin
Gilkeson, Gary
                                                                                                                                                                                                                                                                                                                                                                                                                               Thurman, Joshua
Taube, Christian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jose M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQ 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 111; DB (
Pred. No. 0.02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1188;
                                                                                                                                                                                                                                                                                                                                                          Complement Pathway and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
```

```
NUMBER OF SEQ ID NOS: 40

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 6

LENGTH: 1141

TYPE: PRT

ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SIGNAL

LOCATION: (1)...(22)

US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 13
US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-11-057-047-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
 밁
                                  S
                                                                       밁
                                                                                                          S
                                                                                                                                              밁
                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Simi
Matches 71;
                                                                                                                                                                                                                      Query Match
Best Local S
Matches 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 6, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/601,368 CURRENT FILING DATE: 2003-06-23 PRIOR APPLICATION NUMBER: US/09/561,263A PRIOR FILING DATE: 2000-04-27 PRIOR APPLICATION NUMBER: US 09/322,790 PRIOR APPLICATION NUMBER: US 09/322,790 PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT
FILE REFERENCE: 07334-275001
 275
                                                                                                                                                159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          502 LKGHET---CMGAV---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          246 FSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               462 FYQMIDET-----KSLSLC----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  186 IHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKP 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       403 RALLDIGROPKNPREDYLDVYVFGVGPLVDSVNINALASKKDNEHHVFKVKD-MEDLENV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       132 FFYSE--REANRSRD--LGAIVYCYG--VKDFNETQLARIADSKDHVFPVNDGFQALQGI 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              350 TNT-----KRALQAVYSMMSWAGDAPPEGWNRTRHVIIIMTDG-LHNMGGNPVTVIQDI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240 EGADAEDGHSPGEQQKRKIVLDPS--GSMNIYLVLDGSDSIGSSNFTGAKRCLTN----
                                                                       217 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       293 -LIEKVASYGVRP--RYGLLTYATVPKVLVRVSDERSSDADWVTEKLNQISYEDHKLKSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90 GDTYMHEGFERASEQIYY-----ENROGY-RTASVIIALTDGELH------EDL 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38 YFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDR-----EQIRQGLEELQKVLPG
                                                                                                              71
                                                                                                                                                                                   IJ
                                                                                                                                                                                                                      l Similarity
49; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 QGGRREDG------GPACYGGFDLYFILDKSGSV------LHHWNEIY 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                            CQTYMDIVIVLDGSNSI-YPWVBVQHFLINILKKFYIGPGQIQVGVVQYGEDVVHBFHL-
                                                                                                                                                                               CYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT
HDSPDLEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD 334
                                                                                                            EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                    7.0%; Score 107; DB 6; Length 1141; llarity 24.1%; Pred. No. 0.044; Conservative 28; Mismatches 88; Indels 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      59; Mismatches
                                    -----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQ 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 110.5; DB Pred. No. 0.012;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----VSEYFVLTAAHC 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GMVWEHKKGNDYHKQPWQAKISVT---RP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels 117; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             761;
                                                                                                                                                                                                                        38;
                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                402
                                                                                                              127
                                                                                                                                                  216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
US-10-601-368-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                              US-10-601-368-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-601-368-4
                                                                         LENGTH: 1188
```

```
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
APPLICANT: LORA, JOSE M.
FILE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REPERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 1090-05-28
INTEREST OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 4
LENGTH: 1166
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
TYPE: PRT
T
                                                                                                                                                                                                   APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
ITITE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/09/561,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR APPLICATION NUMBER: US/09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 3
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 3, Application US/10601368
Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 49; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION
                                              TYPE: PRT ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
NAME/KEY: SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    335 EAAL---KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                137 CQTYMDIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGVVQYGEDVVHEFHL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     313 EAAL---KDIVDALGDRIFSLEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            162 LARIADSKDHVFPVNDGFQALQG 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   253 HDSPDLEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     128 HED-----FNETQ 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  195 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            162 LARIADSKDHVFPVNDGFQALQG 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13 CYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7.0%; Score 107; DB 6 ilarity 24.1%; Pred. No. 0.045; Conservative 28; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            70
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                          ; LOCATION: (1)...(22) US-10-601-368-3
                                                                                                Ś
                                                                                                                                                                                                                                        ş
Search completed: December 14, 2005, 11:59:27 Job time : 5.33534 secs
                                                                                                                                        밁
                                                                                                                                                                 S
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                   Query Match 7.0%; Score 107; DB 6; Length 1188; Best Local Similarity 24.1%; Pred. No. 0.046; Matches 49; Conservative 28; Mismatches 88; Indels 38; Gaps 9;
                                                                    335 EAAL---KDIVDALGDRIFSLEG 354
                                                                                                     162 LARIADSKDHVFPVNDGFQALQG 184
                                                                                                                                        275 HDSPDLEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD 334
                                                                                                                                                                       128 HED-----FNETQ 161
                                                                                                                                                                                                         217 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES 274
                                                                                                                                                                                                                                                                                71 EDREQIROGLEELQKVLPGGDTYMHEGFE---RASEQIYYENROGYRTASVIIALTDGEL 127
```

THIS PAGE BLANK (USPTO)

```
Command line parameters:

-MODEL-frame+ p2n.model -DEV=xlh
-Q-/cgn2 | JUSPTO_spool/US09970076/runat_14122005_111850_20999/app_query.fasta_1.2410
-DB=Issued_patents NA -QFMT=fastap_SUFFIX=rni -MINMATCH=0.1 -LOOFCL=0
-LOOPEXT=0 -UNITS=5Lts -START=1 -END=-1 -MARTIX=blosum62 -TRANS-human10.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pot -THR MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTPMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000
-USER=US09970076 @CGN 1 1_535 @runat 14122005 111850_20999 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQÜERY -NEG_SCORES=0 -MAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -MARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                              Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed,
                                                                                                                                                                          Score
                                                                                                           1263
790.5
709
                                                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               seq length:
seq length:
                                                                                                                                                                                                                                                               greater than or equal to the score of the result bein s derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                 Issued_Patents_NA:*

1: /cgn2_6/ptcodata/1/ina/1_COMB.seq:*

2: /cgn2_6/ptcodata/1/ina/5_COMB.seq:*

3: /cgn2_6/ptcodata/1/ina/6A_COMB.seq:*

4: /cgn2_6/ptcodata/1/ina/6B_COMB.seq:*

5: /cgn2_6/ptcodata/1/ina/PTUS_COMB.seq:*

6: /cgn2_6/ptcodata/1/ina/PCTUS_COMB.seq:*

7: /cgn2_6/ptcodata/1/ina/PCOMB.seq:*

8: /cgn2_6/ptcodata/1/ina/PE_COMB.seq:*

9: /cgn2_6/ptcodata/1/ina/RE_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xgapop 10.0 , X
Ygapop 10.0 , Y
Ygapop 6.0 , F
Fgapop 6.0 , F
Delop 6.0 , C
                                                                                                                                                                            Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2_COPY_27_321
1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  December 18, 2005, 07:01:37; Search time 207.111 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1303057 seqs, 888780828 residues
     82.2
51.5
46.2
46.2
43.1
10.8
10.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GQGGRREDGGPACYGGFDLY.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000000000
     1609
2234
1492
1492
3981
3519
3519
3519
                                                                                                                                                                              踞
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Xgapext
Ygapext
Fgapext
Delext
US-09-620-312D-8
US-10-104-047-669
US-10-174-528-297
US-09-774-528-297
US-09-799-451-250
US-09-286-889-45
US-08-485-618-45
US-08-362-652-45
US-08-605-672-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (without alignments)
2531.884 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GLSFISSSVIITTHCSDGS
Sequence 8, Appli
Sequence 669, App
Sequence 297, App
Sequence 297, App
Sequence 250, App
Sequence 45, Appl
Sequence 45, Appl
Sequence 45, Appl
Sequence 45, Appl
Sequence 45, Appl
                                                                                                                                                                            Description
                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 8, Application US/0
Patent No. 6569662
GENERAL INFORMATION:
APPLICANT: Tang, Y. Tom
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1
US-09-620-312D-8
                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4403355433110
                                                                                                                                                                                                                                                                                                                                                     Asundi, Vinod
Zhang, Jie
Ren, Feiyan
Chen, Rui-hong
Zhao, Qing A.
Wehrman, Tom
```

```
231519
231519
231519
231519
231619
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
231613
23
US-08-482-293A-45
US-09-93-043-45
US-09-93-043-45
US-09-350-259-45
US-09-368-307A-45
US-09-368-307A-52
US-08-485-618-52
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-08-485-618-36
US-09-350-259-36
US-08-485-618-36
US-09-350-259-54
US-09-488-307A-36
US-08-485-618-36
                                                                                                                                                                 Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
                                                                                                                         Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                    Sequence
Sequence
                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                    Sequence
                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                            Sequence
```

## ALIGNMENTS

```
APPLICANT: Xue, Aidong J.
APPLICANT: Yang, Yonghong
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Jian-Rui
APPLICANT: Zhou, Ping
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dinwei
APPLICANT: John Tillinghast
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6569662el Nucleic Acids and
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 784CIP2B
CURRENT APPLICATION NUMBER: US/09/620,312D
CURRENT APPLICATION NUMBER: US/09/620,312D
CURRENT FILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: 09/552,317
PRIOR FILING DATE: 2000-04-25
PRIOR FILING DATE: 2000-01-21
NUMBER OF SEQ ID NOS: 1105
SOFTWARE: pt_FL_genes Version 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8, Application US/09620312D
o. 6569662
```

```
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; NAME/KEY: CDS;
; LOCATION: (309)..
US-09-620-312D-8
RESULT 2
US-10-104-047-669
                                                                   В
                                                                                   S
                                                                                                       밁
                                                                                                                           S
                                                                                                                                                     片
                                                                                                                                                                   S
                                                                                                                                                                                     밁
                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores: Pred. No.:
                              밁
                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 1609
TYPE: DNA
ORGANISM: Homo:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NO 8
                                                                    1047
                              1107
                                                 241
                                                                                        221
                                                                                                           987
                                                                                                                                201
                                                                                                                                                     927
                                                                                                                                                                                             867
                                                                                                                                                                                                                161
                                                                                                                                                                                                                                    807
                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                           747
                                                                                                                                                                                                                                                                                                                  687
                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                           627
                                                                                                                                                                                                                                                                                                                                                                                                   567
                                                                                                                                                                                                                                                                                                                                                                                                                                           507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         387
                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyr
                                                                                                                                                                                                                                                                                                                              AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVallleIle
                                                                                                                                                                                                                                                                                                                                                                      GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                        GluProSerThrIleCysAlaGlyGluSerPheGlnValValArgGlyAsnGlyPhe
                                                                                                                                                                                                       GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr
                                                                                                                                                                                                                                                                                      AlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                             ThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTAC
                                                 LeuAsnGlu
                                                                                 ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                            GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTC
                                                                                                                                                       GCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCT
                                                                                                                                                                AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                                                                                                                                                                                                           ACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTA
                              CTCAGTAAG
                                                                     CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                             CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                     AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGAAAGATTTCAATGAGACA
                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.92e-154
1263.00
100.00%
99.18%
82.23%
                                                 243
                              1115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-620-312D-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1609
241
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (1-1609)
                                                                      1106
                                                                                                              1046
                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         446
                                                                                         240
                                                                                                                                                      986
                                                                                                                                                                          200
                                                                                                                                                                                             926
                                                                                                                                                                                                                                     966
                                                                                                                                                                                                                                                                            806
                                                                                                                                                                                                                                                                                                                   746
                                                                                                                                                                                                                                                                                                                                                           686
                                                                                                                                                                                                                                                                                                                                                                               100
                                                                                                                                                                                                                                                                                                                                                                                                   626
                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                           566
                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                   á
                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                 몂
                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                    밁
                                  S
                                                           밁
                                                                              5
                                                                                                   밁
                                                                                                                                           밁
                                                                                                                                                           Ş
                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo US-10-104-047-669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Мо.
:
                                                                                                     1078
                                                                                                                                            1018
                                                                                                                                                                                                                                                                   844
                                                                                                                                                                                                                                                                                                                                                                                                                                  604
                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                             60
 PheArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerVal
```

```
Sequence 669, Application US/10104047

Patent No. 6943241

GENERAL INFORMATION:

APPLICANT: HELIX RESEARCH INSTITUTE

TITLE OF INVENTION: No. 6943241e1 full length cDi

FILE REFERENCE: H1-A0105

CURRENT APPLICATION NUMBER: US/10/104,047

CURRENT FILING DATE: 2002-03-25

PRIOR APPLICATION NUMBER:

PRIOR APPLICATION NUMBER:

PRIOR FILING DATE:

PRIOR FILING DATE:

SOFTWARE: PatentIN Ver. 2.1

SEQ ID NO 669

LENGTH: 2234

TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2_COPY_27_321 (1-295)
1198 TTGCAGCCCTCAAGTGTCTGTGGGGGAGGAATTTCAGATTGTCTTAAGTGGAAGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     904 CTAGCGAATGAACAAATT-----CAGAAAGCAGGAGGCTTGAAAACCTCCAGTATCATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               784 TCTTCTCAAGCAACTATTATTTGCCATTAACTGGAGACAGAGGCAAAATCAGTAAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GlyGlnGlyGly---ArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTCCCGGGGGGCTGCTGCGCGCCCAGGAGCAGCCCTCCTGCAGAAGAGCCCTTTGATCTC
                            AlaGluProSerThrIleCysAlaGlyGluSerPheGlnValValArgGlyAsnGly
                                                                        GlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAla 199
|||||||||:::|||||||||:::|||||||||
CAGGCTCTTAAAGGAATAATTAATTCTATACTAGCTCAGTCATGTACTGAAATCCTAGAA 1197
                                                                                                                                                GCACAGCTTGAAAGAATTGCTGATTCCAAGGAGCAAGTTTTCCCCTGTCAAAGGTGGATTT
                                                                                                                                                                     ThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPhe
                                                                                                                                                                                                                      AAGATATCCAGGTCACTTGGGGGCTAGTGTTTATTGTGTTGGTGT
                                                                                                                                                                                                                                           AsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGlu
                                                                                                                                                                                                                                                                                            ATTGCTCTGACAGATGGCAAGTTGGACGGTCTGGTGCCATCATATGCAGAGAAAGAGGCA
                                                                                                                                                                                                                                                                                                                 IleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAla
                                                                                                                                                                                                                                                                                                                                                                                       ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.77e-92
790.50
71.53%
53.22%
51.46%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           x US-10-104-047-669 (1-2234)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2234
157
54
81
3
                                                                                                                                                                                                                        CCTTGATTTTGAACAA
                                                                                                                                                                                      179
                                                                                                                                                                                                                        1077
                                                                                                                                                                                                                                                            159
                                                                                                                                                                                                                                                                                                1017
                                                                                                                                                                                                                                                                                                                                139
                                                                                                                                                                                                                                                                                                                                                                                                                                            903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19
                                                                                                                                                                                                                                                                                                                                                                      957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 723
```

309 130

210

489 190 429 170 369

549

609

```
Percent Similarity:
Beet Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (79)..(1434)
US-09-774-528-297
                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
 ફ
                                                            ঠ
                                                                                                밁
                                                                                                                         S
                                                                                                                                                                                          δ
                                                                                                                                                                                                                        US-09-970-076-2_COPY_27_321 (1-295) x US-09-774-528-297 (1-1492)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                            밁
                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-774-528-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFO
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 441
SOFTWARE: Dt_FL_genes Version 2.0
SEQ ID NO 297
LENGTH: 1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 297, Application US/09774528 Patent No. 6743619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: 802
CURRENT APPLICATION NUMBER: US/09/774,528
CURRENT FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6743619el Nucleic Acids
TITLE OF INVENTION: Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        280
                                136
 91
                                                                                                                               51
                                                                                                                                                             71
                                                                                                  76
                                                                                              GAAATGAGATTATCTTTCATTGTTTTTCTTCTCAAGCAACTATTATTTTGCCATTAACT 135
                                                                                                              GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAACGAGTGTAAAACCAGTAAGTGTACAGCTTAATTCTATGCTTTGTCCTGCACCTATC 1377
AspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg 110
                                GGAGACAGAGGCAAAATCAGTAAAGGCTTGGAGGATTTAAAACGTGTTAGTCCAGTAGGA 195
                                                 GluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGly 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ren, Feiyan
Zhang, Jie
Zhao, Qing A.
Yang, Yonghong
Xue, Aidong J.
Wehrman, Tom
Wang, Jian-Rui
Wang, Dunzui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGAATAAAGCTGGAGAAACTCTTGATGTTTCAGTGAGCTTTAATGGAGGAAAATCTGTC 1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleSerSerSerValIleIleThrThrThrHisCysSerAspGly 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Liu, Chenghua
Asundi, Vinod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tang, Y. Tom
Zhou, Ping
Goodrich, Ryle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Y. Tom
                                                                                                                                                                                                                                                            7.98e-82
709.00
72.35%
52.65%
46.16%
                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                            1492
139
52
71
2
                                                                                                                                                               75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      259
                            ; LENGTH: 1492
; TYPE: DNA
; ORGANISM: Homo sapiens
; EATURE:
; NAME/KEY: CDS
; LOCATION: (79)..(1434)
US-10-120-988-297
                                                                                                                                    APPLICANT: Tang, Y. Tom
APPLICANT: Liu, Chenghua
APPLICANT: Liu, Chenghua
APPLICANT: Liu, Chenghua
APPLICANT: Ren, Feiyan
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
FITLE OF INVENTION: No. 6919193el Nucleic Acids and
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 802CON
CURRENT APPLICATION NUMBER: US/10/120,988
CURRENT FILING DATE: 2002-04-11
PRIOR APPLICATION NUMBER: 09/774,528
PRIOR APPLICATION NUMBER: 09/774,528
PRIOR FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
SOFTWARE: pt_FL_genes Version 2.0
SEQ ID NO 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-120-988-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 297, Application US/10120988 Patent No. 6919193
                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               291 CysSerAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       490 GCTCAGTCATGTACTGAAATCCTAGAATTGCAGCCCTCAAGTGTCTGTGTGGGGGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    231 CysSerPheLysIleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAsp 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         151 CysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        131 LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    250 GGAGGCTTGAAAACCTCCAGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               111 GlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTTCTAACGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValSerMetAsnAspGlyLeuSerPheIleSerSerSerValIleIleThrThrHis 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCA 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PheGlnValValValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeu 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ly8Ly8SerCy8IleGluIleLeuAlaAlaGluProSerThrIleCy8AlaGlyGluSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGCCATCATATGCAGAGAAAGAGGCAAAGATATCCAGGTCACTTGGGGCCTAGTGTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTGTTGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGCTTTAATGGAGGAAAATCTGTCATTTCAGGATCATTAATTGTCACAGCCACAGAA 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ThrTyrLeuLeuCysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCACTTACACTGTAAATGAAACATATACAACGAGTGTAAAACCAGTAAGTGTACAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTCAGATTGTCTTAAGTGGAAGAGGATTCATGCTGGGCAGTCGGAATGGCAGTGTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           801
                                                                                                                                                                                                                                                                                            and
```

```
RESULT 5
US-09-799-451-250
US-09-799-451-250
; Sequence 250, Application US/
; Patent No. 6783969
; GENERAL INFORMATION:
; APPLICANT: Tang, Y. Tom
; APPLICANT: Zhou, Ping
; APPLICANT: Goodrich, Ryle
                                                                                                                                                                                          g
B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                     밁
                                                                                                                    Ş
                                                                                                                                                В
                                                                                                                                                                Ś
                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                   뭥
                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                       370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  310
                                                                                                                          291
                                                                                                                                                  730
                                                                                                                                                                                             670
                                                                                                                                                                                                                                                            231
                                                                                                                                                                                                                                                                                                       211
                                                                                                                                                                                                                                                                                                                                                    191
                                                                                                                                                                                                                                                                                                                                                                          430
                                                                                                                                                                                                                                                                                                                                                                                               171
                                                                                                                                                                                                                                                                                                                                                                                                                                           151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    136
                                                                                                      790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16
                                                                                                     CysSerAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CysSerPheLysIleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAsp
                                                                                                                                                                                                                                                                                               PheGlnvalvalvalargGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeu
||||||:::|||::: ||| ||||||
                                                                                                                                                                                                                                                                                                                                                                                     HisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                    TGTGTTGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                     CysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAsp
|||||||||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATAACTGGATTGAAATTTATAATTTCGTACAGCAACTTGCGGAGAGATTTGTGAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerPro
                                                                                                                                                 GTGAGCTTTAATGGAGGAAAATCTGTCATTATTCAGGATCATTAATTGTCACAGCCACAGAA
                                                                                                                                                                      ValSerMetAsnAspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrHis
                                                                                                                                                                                                     ThrTyrLeuLeuCysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGln
                                                                                                                                                                                                                                                                                   TTTCAGATTGTCTTAAGTGGAAGAGGATTCATGCTGGGCAGTCGGAATGGCAGTGTTCTC
                                                                                                                                                                                                                                                                                                                                                                            AATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCA
                                                                                                                                                                                                                                       TGCACTTACACTGTAAATGAAACATATACAACGAGTGTAAAACCAGTAAGTGTACAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7.98e-82
709.00
72.35%
52.65%
46.16%
                                                                                                                           294
                                                          US/09799451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-120-988-297 (1-1492)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1492
139
52
71
2
                                                                                                                                                                                                                                                                                                                                                                                                190
                                                                                                                                                                                                                                                                                                                                                                                                                       429
                                                                                                                                                  789
                                                                                                                                                                                                                                        669
                                                                                                                                                                                                                                                             250
                                                                                                                                                                                                                                                                                   609
                                                                                                                                                                                                                                                                                                                               549
                                                                                                                                                                                                                                                                                                                                                                          489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/799,45
CURRENT FILING DATE: 2001-03-05
NUMBER OF SEQ ID NOS: 948
SOFTWARE: pt FL_genes Version 2.0
SEQ ID NO 250
LENGTH: 3981
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LCCATION: (297)..(1118)
US-09-799-451-250
                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
  RESULT 6
US-08-286-889-45
; Sequence 45, Application US/08286889
; Patent No. 5470953
                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                   8
                                                                          S
                                                                                                     음 성
                                                                                                                                          밁
                                                                                                                                                                S
                                                                                                                                                                                           밁
                                                                                                                                                                                                           S
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_27_321 (1-295)
                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Asundi, Vinod
APPLICANT: Ren, Felyan
APPLICANT: Xue, Aidong J.
APPLICANT: Xue, Aidong J.
APPLICANT: Xae, Aidong J.
APPLICANT: Wang, Jian-Rui
APPLICANT: Mang, Jian-Rui
APPLICANT: Mang, Jian-Rui
APPLICANT: Yamazaki, Victoria
APPLICANT: Wang, Rui-hong
APPLICANT: Wang, Rui-hong
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Yonghong
APPLICANT: Wehrman, Tom
APPLICANT: Ghosh, Reena
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 803
CIUDENET ADDITCATION NIMBER: 115/09/72
                                                                                                                                                                                                                                                                                                                                                                                                                                                       No.:
                                                                                                                                                                                                                                                                                  187 HisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGluProSerThrIleCys
                                                           363
                                                                                                                           267
                                                                                                                                                  243
                                                                                                                                                                       247
                                                                                                                                                                                                                  227
                                                                                                                                                                                                                                        123
                                                                                                                                                                                                                                                                                                                                                     167
                                                                                                                                                                                                                                                                                                                               w
                                                                                                                                                                                           ThrThrThrHisCysSerAspGlySer
                                                                                                                   AlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSerSerSerVallleIle
                                                                                                                                                 SerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLysGluValGlyMetLys
                                                                                                                                                                                                                                        AlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArgHisAlaArgAsnVal
                                                                                                                                                                                                                                                                                                                                GACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATC
                                                                                                                                                                                                                                                                                                                                           AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIle
                                                                                                       GCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTATCTCCAGTTCTGTCATCATC
                                                                                                                                                                                                                                                                                                                                                                                                  5.11e-75
662.00
100.00%
100.00%
43.10%
                                                                                                                                                                                                                                                                                                                                                                            ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic
                                                                                                                                                                                                                                                                                                                                                                            US-09-799-451-250 (1-3981)
                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                           389
                                                                                 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and
                                                                                                                                                                                                                                                                                                                                                                                                3981
129
0
0
```

266

242

206 122 226 246

286

```
US-09-970-076-2_COPY_27_321 (1-295) x US-08-286-889-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-286-889-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:

APPLICANT: Gallatin, W. Mich
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5470953el Human
TRANS OF SEQUENCES: 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: 312-474-630
TELEPAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: p38,659
REFERENCE/DOCKET NUMBER: 27866/32168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                No . .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: CDNA FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/286,88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: Til
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENGTH:
                                                                        661
                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                            481
 721
                                                                                                                                               109
                                                                                                                                                                               49
                                                                                                                                                                                                                                                       30
                                  84
                                                                                                          69
                                                                                                                                                                                                                                                                                                                              11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60606-6402
                                                                                                                                                                                                                                                    ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 48
   CAA--
                            GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu 103
                                                                    TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC 720
                                                                                                        LeuThrGluAspArg-------GluGlnIleArgGlnGlyLeuGluGluLeu 83
                                                                                                                                                                                                                   GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                               SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 68
                                                                                                                                                                                                                                                                                          ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Illinois
                                                                                                                                           AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3519 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E: Marshall, O'Toole, Ge
233 South Wacker Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS
52..3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              single
                                                                                                                                                                                                                                                                                                                                                                                                      1.54e-10
166.00
46.15%
28.21%
10.81%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08/286,889
-GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gerstein, Murray &
e, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                      Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #1.25
                                                                                                                                                                                                                                                                                                                                                                                                      3519
42
96
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Borun
                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-485-618-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 45, Application US/08485618 Patent No. 5728533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5728533el
                                                                                                                                                      TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
ADDRESSEE: Marshall, O'Toole, G300 Sear Tower
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
CITY: C
                                                                                                      NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                   TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: United States 
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1102 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               214 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   160 ---ThrGlnLeuAlaArgIle-------AlaAspSerLysAspHisValPhe 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                997 AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               886 AAAGCT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141 ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        123 ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          766 GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              104 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 110:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGATGGGCAGAAATTCAGAGACCCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Illinois
                                                   312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                  US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                 45:
                                                                                                          27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human
                                                                                                                                                                                                                                                                                                                                                                                                                        Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                        #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Subunit
```

996

936

문 Ś

밁 ঠ ફ 밁 S

밁

Ş

용

```
FEATURE:
NAME/KEY:
LOCATION:
US-08-485-618-45
          US-08-362-652-45; Sequence 45, Application; Patent No. 5766850
                                                                                                        S
                                                                                                                                                          Ś
                                                                                                                                                                                          밁
                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2_COPY_27_321 (1-295) x US-08-485-618-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
0
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
                                                                                                                                     1051
                                                                                                                                                                                           997
                                                                                                                                                                                                                     174
                                                                                                                                                                                                                                                937
                                                                                                                                                                                                                                                                           160
                                                                                                                                                                                                                                                                                                       988
                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                            826
                                                                                                                                                                                                                                                                                                                                                                                     123
                                                                                                                                                                                                                                                                                                                                                                                                                 766
                                                                                                                                                                                                                                                                                                                                                                                                                                            104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                        214 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30
                                                                                                                                                                                                                     ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                                                                        AAAGCT-----
                                                                                                                                                                                                                                                                                                                      ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp----PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                 GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTĞCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                                                                GAGATGTCACAAGAAĠĠŤŤŤĊAGCTCAĠĆŤCTCTCAATGĠÁŤ
                                                                                                                                                               CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 213
                                                                                                                                                                                                                                                CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                          ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                            ACAGATGGGCAGAAATTCAGAGACCCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                    ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                           AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3519 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
52..3519
                                                                                                                                      - ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.54e-10
166.00
46.15%
28.21%
10.81%
                           US/08362652
                                                                                                                                                                                                                                                                                                       -ĠĠĠATCĂTTCGCTĂTGCTATĀĠĠĠĠTĠĠGĀĠĀTGCCTTĆCGĠĠĀĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3519
66
42
96
30
                                                                                 1143
                                                                                                           227
                                                                                                                                                                                                                                                                           173
                                                                                                                                                                                                                                                                                                                                  159
                                                                                                                                                                                                                                                                                                                                                            885
                                                                                                                                                                                                                                                                                                                                                                                                                  825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 48
                                                                                                                                                                                           1050
                                                                                                                                                                                                                                                                                                        936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29
                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                밁
                                                                                                        8
                                                                                                                                      맑
                                                                                                                                                             Ś
                                                                                                                                                                                           밁
                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                     ;
US-08-362-652-45
δ
                           片
                                               δ
                                                                                                                                                                                                                                                                             DB:
                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
FEATURE:
NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                               No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                            661
                                                                                 601
                                                                                                                                                                                             481
                                                      69
                                                                                                            49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chicago
: Illinois
```

```
US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 08/173
FRIGHT APPLICATION DATA: 23-DEC-1993
PRIOR APPLICATION DATA: US 08/286
APPLICATION NUMBER: US 08/286
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., JOSeph A.
REGISTRATION NUMBER: 2786
REFERENCE/DOCKET NUMBER: 2786
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: NO. 5766850el NUMBER OF SEQUENCES: 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                           541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                              30 ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                11 ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleic acid
GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu 103
                                         TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC 720
                                                                                                                           AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                           CCAGAGTGTCCAGGACAAGAGATGGACTTGCTTTCCTGATTGGCTCCGGCAGCATT
                                                                                  LeuThrGluAspArg-----
                                                                                                                                                                SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3519 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
52..3519
                                                                                                                                                                                                                                                                                                                                                                                                                                        1.54e-10
166.00
46.15%
28.21%
10.81%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27866/32391
                                                                                                                                                                                                                                                                                                                                                                              x US-08-362-652-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
                                                                                -----GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Subunit
                                                                                                                               660
                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                      48
                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                       29
                                                                                      83
```

밁 श 밁

```
RESULT 9
US-08-605-672-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 45, Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NERAL INFORMATION W. MIGNAGE APPLICANT: Gallatin, W. MIGNAGE APPLICANT: Van der Vieren, Monica APPLICANT: VAN DER VIERNICA NO. 5817515el Human TITLE OF INVENTION: NO. 5817515el Human
                                                                APPLICATION NUMBER: US 08/362
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                             PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                   TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 25.
STREET: Chicago
TTY: Chilinof
                                                                                                                                                                             APPLICATION NUMBER: US FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: United States
                                                                                                                                                                                                                                                                          CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                   TELEPHONE:
                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 766 GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTĠĊĊAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          58175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProvalAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA--- 1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E: Marshall, O'Toole, Gerstein, Murray & 233 South Wacker Drive, 6300 Sear Tower
                        312-474-0448
                                      312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 110:
                                                                                                                                                US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/08605672
                                                                                                                                                                                              US 08/286,889
                                                                                                                                                                                                                                                                                                         US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                    27866/32684
                                                                                                                                                                                                                                                                                                                                      Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                        #1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             765
RESULT 10
US-08-482-293A-45
; Sequence 45, Ap
                                                                    B
                                                                                               S
                                                                                                                                밁
                                                                                                                                                           Ś
                                                                                                                                                                                              밁
                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                               ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-605-672-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        No::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                          937
                                                                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                                                                       886
                                                                                                                                                                                                                                                                                                                                                                                    826
                                                                                                                                                                                                                                                                                                                                                                                                                 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                766
                                                                                                                                                                                                                                                                                                                                                     141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30
        Application US/08482293A
```

र् 밁 ঠ

밁

र्

밁 δ 문 र् 밁 δ

유

```
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS: 81
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       104 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                               214 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69 LeuThrGluAspArg-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11 ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT
                                                                                                                                                                                                                                                        ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 193
                                                                                                                                                                                                                                                                                                                           CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC 996
                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 213
                                                                                                                                                                                                                   AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA----
                                                                                                                                                                                                                                                                                                                                                                              ---ThrGlnLeuAlaArgIle-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---LeuHisHisTrpAsnGluIleTyrTyrpheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
52..3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single
                                                                                                        ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.54e-10
166.00
46.15%
28.21%
10.81%
                                                                                                                                                                                                                                                                                                                                                                                                                                   -GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                45:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           x US-08-605-672-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ----GluGlnIleArgGlnGlyLeuGluGluLeu 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative:
                                                                                                                                                                                                                                                                                                                                                                           ----AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3519
66
42
96
30
```

48

600

660

29

540

173

159 936

765

```
Ş
                                                        밁
                                                                                 ঠ
                                                                                                                                        ঠ
                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
밁
                                                                                                                밁
                                                                                                                                                                   US-09-970-076-2_COPY_27_321 (1-295) x US-08-482-293A-45 (1-3519)
                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                   US-08-482-293A-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: 11--
TOLECUT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5831029el NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 276
TELECOMMUNICATION INFORMATION:
TELECHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOPTWARE: Patentin Release #1.0, Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS: ADDRESSEE: Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                        NO.:
                                                                                                                                                                                                                                                                                                                               NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Chicago
                                                                                                                481
                                                        541
601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION:
                            49
                                                                                   30
                                                                                                                                          11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60606-6402
                       SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 68
                                                                                ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 48
                                                                                                                ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Illinois
: United States
AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         312-474-0448
                                                                                                                                                                                                                                                                                                                                52..3519
                                                                                                                                                                                                               1.54e-10
166.00
46.15%
28.21%
10.81%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                             45:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27866/32684
                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                 Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                               Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #1.25
                                                                                                                                                                                                  3519
66
42
96
30
                                                        600
                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-943-363-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                      APPLICATION NUMBER: US FILING DATE: 5-AUG-1994 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: NO. NUMBER OF SEQUENCES: 11: CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                    CITY:
                                                                                                                                                                         APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                          MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                               STREET:
                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                           ZIP:
                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  886 AAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123
                                                                                                                                                                                                                                                                                           60606-6402
                                                                                                                                                                                                                                                                                                                                   Chicago
                                                                                                                                                                                                                                                                                                                    Illinois
                                                                                                                                                                                                                                                                                                       United States
```

```
Sequence 45, Application US/08943363
Patent No. 5837478
                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Gallauli, ... Monica APPLICANT: Van der Vieren, Monica ... No. 5837478el Human
           FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
                                                                                                                                                                                                                                      CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1102 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                214 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           160 ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141 ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp----PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         766 GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTĞCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            104 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      997 AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    84 GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 - ÀTCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US 08/362,652
                                                                                                                                                                                      US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ĠĠĠATĊĂŤŤĊĠĊŤĂŤĠĊŦATAĠĠĠĠŤĠĠĠAĠĂŤĠĊĊŦŤĊĊĠĠĠĀĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                        Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
```

```
US-09-970-076-2_COPY_27_321 (1-295) x US-08-943-363-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-943-363-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 3519 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER:
214 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                        997
                                                                                                                                                                              174
                                                                                                                                                                                                                     937
                                                                                                                                                                                                                                                            160
                                                                                                                                                                                                                                                                                                    988
                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                 826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         199
                                                                                                                                                                                                                                                                                                                                                                                                                        123
                                                                                                                                                                                                                                                                                                                                                                                                                                                           766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                104 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                                                                                                                                                       ProvalAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                    ---ThrGlnLeuAlaArgIle-------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                     ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ANGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA----
                                                                                                                                                                                                                     CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                    AAAGCT-----GGGATCATTCGCTATGCTATAGGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                    ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                 ACAGATGGGCAGAAATTCAGAGACCCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                               CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA
                                                       - ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.54e-10
166.00
46.15%
28.21%
10.81%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          - GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3519
66
42
96
30
                                                            1101
                                                                                                 213
                                                                                                                                                                              193
                                                                                                                                                                                                                                                            173
                                                                                                                                                                                                                                                                                                                                       159
                                                                                                                                                                                                                                                                                                                                                                                 885
                                                                                                                                                                                                                                                                                                                                                                                                                    140
                                                                                                                                                                                                                                                                                                                                                                                                                                                           825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48
                                                                                                                                                                                                                     996
                                     밁
                                                                        ş
                                                                                                                    밁
                                                                                                                                                   S
                                                                                                                                                                                              밁
                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 12 .
US-09-193-043-45
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2_COPY_27_321 (1-295) x US-09-193-043-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Description of US-09-193-043-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: 27866/35004
CURRENT APPLICATION NUMBER: US/09/193,043
CURRENT FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER FILING DATE: 1994-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 45, Appli
Patent No. 6251395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Mus musculus
FEATURE:
NAME/KEY: CDS
LOCATION: (52)..(3516)
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILLING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Gallatin, Michael W. APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 6251395el Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Мо
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1102
141 ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu
                                                                            123 ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                    766 GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                               661 TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                        541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                     104 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                   49
                                                                                                                                                                                                                                                                                                                  69 LeuThrGluAspArg-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30 ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11 ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                       ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                        GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                                                                                                                                                                                            AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                                                                                 SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.54e-10
166.00
46.15%
28.21%
10.81%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/09193043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Σ
                                                                                                                                                                                                  GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                    -----GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Artificial Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            primer
```

Query

Match:

Хо ::

á 문 ş 밁 ঠ 밁 Ś 밁 ક 유 ş 문 Ş 밁 ঠ 밁 ş 밁 ঠ 밁 Ś 밁 S

159 885 140 825 103

720 83 660

122 765 8

600

Mon

Dec

19

S

Ş 밁 8 밁

660

```
Ş
                                                                                    S
                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                            밁
                                                                                                                                     밁
                                                                                                                                                                                                                                                                            Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-688-307A-45
                                                                                                                                                                                                                         US-09-970-076-2_COPY_27_321 (1-295) x US-09-688-307A-45 (1-3519)
                                                                                                                                                                                                                                                                                                                    Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-688-307A-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 09/193,043
PRIOR FILING DATE: 1998-11-16
PRIOR APPLICATION NUMBER: 08/605,672
PRIOR FILING DATE: 1996-02-22
PRIOR FILING DATE: 1996-02-22
PRIOR PRIOR DATE: 1993-12-23
PRIOR APPLICATION NUMBER: 08/173,497
PRIOR FILING DATE: 1993-12-23
PRIOR APPLICATION NUMBER: 08/173,497
PRIOR FILING DATE: 1994-08-05
PRIOR FILING DATE: 1994-08-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn
SEQ ID NO 45
LENGTH: 3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 45, Application US/09688307A Patent No. 6432404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 08/362,652
PRIOR FILING DATE: 1994-12-21
PRIOR APPLICATION NUMBER: 08/943,363
PRIOR FILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 643240461 Human Beta-2
EILE REFERENCE: 27866/36646
CURRENT APPLICATION NUMBER: US/09/688,307A
CURRENT FILING DATE: 2000-10-13
CURRENT FILING DATE: 2000-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PEATURE:
NAME/KEY: CDS
LOCATION: (52)..(3516)
OTHER INFORMATION: Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                   No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1102 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            174 ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         937 CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160 ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe
                                            541
                                                                                        30
  49
                                              GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGCT--
SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 68
                                                                                    ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 48
                                                                                                                                       ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 1101
                                                                                                                                                                                                                                                                                             1.54e-10
166.00
46.15%
28.21%
10.81%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of Artificial Sequence: primer
                                                                                                                                                                                                                                                                                             Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
                                                                                                                                                                                                                                                                        3519
66
42
96
30
                                                                                                                                                                                   29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  936
                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/350,259
CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/193,043
EARLIER FILING DATE: 1998-11-16
EARLIER FILING DATE: 1998-11-3,497
EARLIER FILING DATE: 1993-12-3
EARLIER FILING DATE: 1993-12-3
EARLIER FILING DATE: 1993-12-3
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-350-259-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 45, Application US/09350259
Patent No. 6620915
GENERAL INFORMATION:
                                                                                                                                                                                                      SOFTWARE: PatentIn Ver.
SEQ ID NO 45
LENGTH: 3519
                                                                                                                                                                                                                                                                        EARLIER FILING DATE: 1994-12-21
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                           EARLIER APPLICATION NUMBER: 08/362,652
EARLIER FILING DATE: 1994-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 6620915el Human 2
                                          FEATURE: OTHER INFORMATION: Description of Artificial Sequence: primer
                                                                                                                                       ORGANISM: Mus
FEATURE:
                                                                                           NAME/KEY: CDS
LOCATION: (52)..(3516)
                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1102 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 214 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            766 GAGCTATTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 104 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661 TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84 GlnLyaValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     69 LeuThrGluAspArg-------GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAGCT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp----PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ---ThrGlnLeuAlaArgIle--------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAGATGGGCAGAAATTCAGAGACCCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC
                                                                                                                                                              musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -ĠĠĠATCĂTTCGCTĂTGCTATAĠĠĠĠŢĠGGĀĠĂŤGCCŤTĊCGGĠĀĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ĠĠĊĊŢĠĂĊĠŤĂĊĄĊĄĠĊĊŢĊĠĠĠĊĄŢĊĊĄĠĄĄĄĠŢĠĠŢĠĄĄĄ
```

173 936 159 885 140 825 122 765 103

```
US-09-970-076-2_COPY_27_321 (1-295) x US-09-350-259-45 (1-3519)
                              APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5728533el HU
NUMBER OF SEQUENCES: 103
CORRESSONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gere
STREET: 233 South Wacker Drive, 6:
                                                                                                                                                                                                                                                                                                 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                    ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGCCAAATTCAGGAGAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuThrGluAspArg-------GluGlnIleArgGlnGlyLeuGluGluLeu 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                             ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.54e-10
166.00
46.15%
28.21%
10.81%
                                                                                                                                                                                                                   US/08485618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                    Gerstein, Murray &
e, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels:
                                                                                                                   Human
                                                                                                                2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3519
66
42
96
30
                                                                                                                   Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   885
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       996
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                       S
밁
                            δ
                                                                           片
                                                                                                          á
                                                                                                                                                   뭥
                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-485-618-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173
FILING DATE: 23-DEC-193
FILING DATE: 23-DEC-193
PRIOR APPLICATION NUMBER: US 08/286
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362
FILING DATE: 21-DEC-1994
APPLICATION NUMBER: US 08/362
FILING DATE: 21-DEC-1994
APPLICATION NUMBER: US 08/362
FILING DATE: 31-DEC-1994
APPLICATION NUMBER: 38/659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
715
                                    104 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                          610 TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                        550
                                                                                                                                                                                                                                                                                                                  490 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                430
                                                                                                                   84
                                                                                                                                                                                                 69
                                                                                                                                                                                                                                                                             49
                                                                                                                                                                                                                                                                                                                                                           30
                                                                                                                                                                                                                                                                                                                                                                                                                                   11 ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleic acid
GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                          GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                               LeuThrGluAspArg---
                                                                                                                                                                                                                                                                                                                                                                                 AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                           SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                                                                                                                                                                       ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3803 base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1..3486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.74e-10
166.00
46.15%
28.21%
10.81%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08/362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08/173,497
                                                                           GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-485-618-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   , 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version
                                                                                                                                                                                            -GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         世
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3803
66
42
96
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (1-3803)
                                       122
                                                                                                                   103
                                                                                                                                                          669
                                                                                                                                                                                                                                        609
                                                                                                                                                                                                                                                                                                                    549
                                                                                                                                                                                                                                                                                                                                                           48
                                                                                                                                                                                                                                                                                                                                                                                                                                       29
                                                                           714
                                                                                                                                                                                                 83
                                                                                                                                                                                                                                                                             83
                                                                                                                                                                                                                                                                                                                                                                                                489
```

RESULT 15 US-08-485-618-52

Sequence 52, Application Patent No. 5728533

GENERAL INFORMATION:

STREET: 233 SC CITY: Chicago

COUNTRY:

United States

á 밁 á 문 á 밁

214

1051 194 997 174 937 160 988

밁

1102

밁 ş 밁

AAAGCT-----

141 826

ঠ

밁 δ

766 104 721

S

123

Ş 밁 Ś

84

199

69

밁

밁

541

Ş B

30

문 á

601

49

ş

11

481

Query Match: DB:

Percent Similarity: Best Local Similarity:

Alignment Scores:

Х ..

Search completed: Decem Job time : 225.111 secs	유 성	유 성	유 성	B 8	용 성	유 왕
	214 1051	194 1000	174 946	160 886	141 835	123 775
Search completed: December 18, 2005, 07:34:00 Job time : 225.111 весв	214 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp 227 	194 CyslleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 213	174 ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 193	160ThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhe	141 ArgSerArgAepLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGlu 159	123 ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn 140
		Val 213 CAC 105	ser 193 999	Phe 173	31u 159     3AA 885	\sn 140 3AG 834
		0				

Run

9

Sequence 176, App
Sequence 23, App
Sequence 17, App
Sequence 17, App
Sequence 17, App
Sequence 13, App
Sequence 15, App
Sequence 15, App
Sequence 15, App
Sequence 23, App
Sequence 23, App
Sequence 19, App
Sequence 19, App
Sequence 11, App1i
Sequence 11, App1i
Sequence 11, App1i
Sequence 11, App1i
Sequence 11, App1i
Sequence 11, App1i
Sequence 116, App
Sequence 186, App
Sequence 186, App
Sequence 186, App
Sequence 300, App
Sequence 300, App
Sequence 186, App
Sequence 25, App1i
Sequence 25, App1i
Sequence 27, App1i
Sequence 21, App1i
Sequence 21, App1i
Sequence 21, App1i
Sequence 21, App1
Sequence 21, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1
Sequence 31, App1

```
Command line parameters:

-MODEL=frame+_p2n.model -DEV=xlh
-O_c/cgn2_1/USBTO_spool/US09970076/runat 14122005_111852_21035/app_query.fasta_1.2410
-O_e/cgn2_1/USBTO_spool/US09970076/runat 14122005_111852_21035/app_query.fasta_1.2410
-DB=PublIshed_Applications_NA_main -OFMT=fastap_-SUFFIX=rnpbm -MINMATCH=0.1
-LOOPEXT=0 -UNITS=bits -STRAT=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cd1 -LIST=45 -DOCALIGN=200 -THR_SCORRE-pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US09970076 (eCGN 1 1 2715 @runat 14122005 111852 21035
-MAXTEN=2000000000 -USER=US09970076 (eCGN 1 1 2715 @runat 14122005 111852 21035
-NCFU=6 -ICFU=3 -NO_MMAP -LARGEQUERY -NEG SCORRE-0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 st
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB seq length: Maximum DB seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                 Pred. No. 18 the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and 18 derived by analysis of the total score distribution.
                                                                                                                                                               Score
       1536
1536
1536
1536
1536
1536
1536
                                                                                                                                                                                                                                                                                                                   Published_Applications_NA_Main:*

1: /cgn2_6/ptodata/1/pubpna/US07_2: /cgn2_6/ptodata/1/pubpna/US09A_3: /cgn2_6/ptodata/1/pubpna/US09A_4: /cgn2_6/ptodata/1/pubpna/US10A_6: /cgn2_6/ptodata/1/pubpna/US10A_6: /cgn2_6/ptodata/1/pubpna/US10B_7: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
       11111111
                                                                                                                                                               Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          December 18, 2005, 07:35:12 ; Search time 945.104 Seconds (without alignments) 2581.163 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-2_COPY_27_321
1536
                                                                                                                                                                                   Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9793542 seqs, 4134689005 residues
                                                                                                                                                                                                                                                                                                                   / cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
/ cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
/ cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
/ cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
/ cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
/ cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
/ cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
/ cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
/ cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
/ cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GQGGRREDGGPACYGGFDLY.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000000000
       1414
1454
1454
5540
5540
5540
5540
                                                                                                                                                               B
                                                                                                                                10
 0 US-11-047-278-1

US-10-133-937-58

US-10-159-533-58

US-99-918-715-176

US-09-918-715-231

US-10-301-827-231

US-10-474-794-176

US-10-474-794-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       summaries
                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GLSFISSSVIITTTHCSDGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19587084
Sequence 1, Appli
Sequence 58, Appl
Sequence 58, Appl
Sequence 176, App
Sequence 231, App
Sequence 198, App
Sequence 176, App
Sequence 231, App
                                                                                                                                                             Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1
US-11-047-278-1
                                        Pred.
                                                      Alignment Scores:
                                                                                                                                                                                                                             APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR FILING DATE: 2001-10-03
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: Patentin Ver. 2.1
     Percent Similarity:
                                                                                         US-11-047-278-1
                                                                                                                                                                               ; SEQ ID NO 1
; LENGTH: 1414
; TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/11047278 Publication No. US20050196407A1 GENERAL INFORMATION:
                                                                                                          FEATURE:
NAME/KEY: CDS
LOCATION: (104)..(1207)
                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.24e-186
1536.00
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-979-159-176
US-11-047-278-5
US-11-038-307-17
US-11-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-15
US-10-038-307-15
US-10-038-307-25
US-10-038-307-25
US-10-038-307-27
US-10-038-307-27
US-10-038-307-19
US-11-047-278-7
US-09-796-753-11
US-10-201-292-1
US-10-201-292-1
US-10-201-292-1
US-10-201-292-1
US-10-201-292-1
US-10-38-307-1
US-10-38-307-25
US-10-38-307-25
US-10-201-292-25
US-10-201-292-25
US-10-201-292-25
US-10-201-292-31
US-10-201-292-31
US-10-201-292-31
US-10-201-292-31
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
   Length:
Matches:
Conservative:
```

Regult

ŏ

```
Best I
Query
DB:
      RESULT 2
US-10-133-937-58
(Sequence 58, Application US/10133937
Publication No. US20030207278A1
GENERAL INFORMATION:
APPLICANT: Khan, Javed
                                                                                                                                               밁
                                                                                                                                                                 á
                                                                                                                                                                                        밁
                                                                                                                                                                                                                S
                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                  중 유
                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                1022
                                                                                                                                                962
                                                                                                                                                                                                 902
                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                842
                                                                                                                                                                                                                                                                                                  782
                                                                                                                                                                                                                                                                                                                         201
                                                                                                                                                                                                                                                                                                                                                  722
                                                                                                                                                                                                                                                                                                                                                                                                  662
                                                                                                                                                                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                                                                    602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242
                                                                                                                       281
                                                                                                                                                                      261
                                                                                                                                                                                                                                                                         221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                                                LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle
                                                                                                                                                                                                             LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                                                                                                                                                                                                                                             GluProSerThrI1eCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                                                                                                                                                                                                                                                                  GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVallleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGCAAGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyr
                                                                                                                                                                                                CTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTA
                                                                                                                                                                                                                                                               ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                                                                                                                                                                                                                   GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                   CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGAAAGATTTCAATGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                                              SerSerSerVallleIleThrThrThrHisCysSerAspGlySer 295
                                                                                                                                                                                                                                                  CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-11-047-278-1 (1-1414)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 000
                                                                                                                                                   1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40
                                                                                                                                                                         280
                                                                                                                                                                                                 961
                                                                                                                                                                                                                        260
                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                           200
                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; APPLICANT: Peterson, Carsten
APPLICANT: Meltzer, Paul
APPLICANT: Meltzer, Paul
; TITLE OF INVENTION: METHODS FOR ANALYZING HIGH DIMENSIONAL DATA FOR CLASSIPYING,
; TITLE OF INVENTION: DIMENOSING, PROGNOSTICATING, AND/OR PREDICTING DISEASES AND
TITLE OF INVENTION: OTHER BIOLOGICAL STATES
; FILE REFERENCE: 11613.56US01
; CURRENT APPLICATION NUMBER: US/10/133,937
; CURRENT FILING DATE: 2002-11-04
; NUMBER OF SEQ ID NOS: 99
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 58
; SEQ ID NO 58
; SEQ ID NO 58
; SEQ ID NO 68
; ORGANISM: Homo sapiens
US-10-133-937-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                   S
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
             5
                                     밁
                                                                 Ś
                                                                                               밁
                                                                                                                 Ş
                                                                                                                                         문
                                                                                                                                                                                                 문
                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scores:
                                                                                                                                                                                                                                                   582
                                                                                                                                                                                                                                                                                                   522
                                                                                                                                                                                                                                                                                                                                                                                                                                                    342
882
                                                                                                                       181
                                                                                                                                                702
                                                                                                                                                                         161
                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                    462
                                                                                                                                                                                                                                                                                                                                                                                                   402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      222
                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyr
                                                                                                                                                                                                                                                                                                                                                  GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTG
                                                                                                                                                                                                                                                                                                   AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVallleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
             ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAAACGGCTTC
                                                             GluProSerThrI1eCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                              AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                 AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACA
                                                                                                                                                                                                                  ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr
                                                                                                                                                                                                                                                  ACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAAAATCCGTCAAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                ThrargGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.39e~186
1536.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-133-937-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1454
295
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (1-1454)
```

521 100 461 80

88

220

941 240 821

761 180 701 160 641 140 583 401

60 341

ঠ 밁 ş

밁 Ş 문

701

761 200

240

881 220 821

941

260

```
APPLICANT: Ringner, Markus
APPLICANT: Reloarson, Carsten
APPLICANT: Petcarson, Carsten
APPLICANT: Petcarson, Carsten
TITLE OF INVENTION: SELECTIONS OF GENES AND METHODS OF USING THE
TITLE OF INVENTION: DIAGNOSIS AND FOR TARGETING THE THERAPY OF INTELLATION NUMBER: US/10/159,563
CURRENT APPLICATION NUMBER: US/10/159,563
CURRENT FILING DATE: 2002-12-09
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
PRIOR APPLICATION NUMBER: US/10/133,937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 58, Application US/10159563
Publication No. US20040009154A1
GENERAL INFORMATION:
APPLICANT: Khan, Javed
APPLICANT: Ringner, Markus
APPLICANT: Peterson, Carsten
APPLICANT: Meltzer, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
US-10-159-563-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2_COPY_27_321 (1-295) x US-10-159-563-58 (1-1454)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-159-563-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Хо
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             942
                                 121
                                                                                                                                                                                                         462
                                                                                                                                                                                                                                                                                                                                                                                                                                        342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261
                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                        402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          282
                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                                                                                                                              19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerSerSerValllelleThrThrThrHisCysSerAspGlySer 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle 280
AlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn
                                                                                                                           AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIle 120
                                                                                                                                                                                                      GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg 100
                                                                                                                                                                                                                                                                                                                                                      ThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PheIleLouAspLysSerGlySerValLouHisHisTrpAsnGluIleTyrTyrPheVal 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCAATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.39e-186
1536.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1454
295
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    THE SAME FOR OF SELECT CANCERS
                                                                                                                                                                                                                                                                                                                        461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1001
                                                                                          581
                                                                                                                                                                                                         521
                                                                                                                                                                                                                                                                                                                                                                                                                                     401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 176 Application US/09918715

| Publication No. US20030017157A1
| GENERAL INFORMATION:
| APPLICANT: Brad St. Croix
| APPLICANT: Brad St. Croix
| APPLICANT: Brad St. Croix
| APPLICANT: Kenneth Kinzler
| ITTL OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
| FILE REFERENCE: 1107.00134
| CURRENT APPLICATION NUMBER: US/09/918,715
| CURRENT FILING DATE: 2000-08-02
| PRIOR APPLICATION NUMBER: 60/222,599
| PRIOR APPLICATION NUMBER: 60/224,360
| PRIOR APPLICATION NUMBER: 60/24,360
| PRIOR APPLICATION NUMBER: 60/24,360
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,850
| PRIOR APPLICATION NUMBER: 60/282,85
                                                                                                                                                                                                                                                                                                                                                                                                       ; LENGTH: 5540
; TYPE: DNA
; ORGANISM: Homo &
US-09-918-715-176
      밁
                                          र्
                                                                                                            US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 4
US-09-918-715-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                          Score:
                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1002
      222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         221 ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerSerSerVall1elleThrThrThrHisCysSerAspGlySer 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluProSerThrI1eCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                2.87e-185
1536.00
100.00%
100.00%
100.00%
                                                                                                                  x US-09-918-715-176 (1-5540)
                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                           5540
295
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1106
```

Ś

밁

밁 ঠ 문 S В S 밁 ঠ

ફ 밁 र्

```
RESULT 5
US-09-918-715-231
Sequence 231, Application US/09918715
Publication No. US20030017157A1
GENERAL INFORMATION:
APPLICANT: Berd St. Croix
APPLICANT: Berd St. Croix
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PA:
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/09/918,715
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR PILING DATE: 2000-08-01
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR APPLICATION NUMBER: 60/224,360
                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                            뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                      1002
                                                                                                                                                                                                                                   1062
                                                                                                                                                                                                                                                                                                                                                                                               882
                                                                                                                                                                                                                                                            281
                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                          942
                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                                                                                                                                                                                                                   822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerSerSerValllelleThrThrThrHisCysSerAspGlySer 295
                                                                                                                                                                                                                                                                                                      LygGluValGlyMetLygAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle
                                                                                                                                                                                                                                                                                                                                                           LeuAsnGluLygProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGACAAATCCGTCAAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
                                                                                                                                                                                                                                   TCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCC
                                                                                                                                                                                                                                                                                                                                           CTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTA
                                                                                                                                                                                                                                                                                                                                                                                               CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACA
                                                                                                 PATTERNS
                                                                                                                                                                                                                                                                                                                                           1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                        1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         341
                                                                                                                                                                                                                                                                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                                                941
                                                                                                                                                                                                                                                                                                                                                                                                                                                   881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-2_COPY_27_321 (1-295)
                                맑
                                                  δ
                                                                                  문
                                                                                                           Ś
                                                                                                                                        밁
                                                                                                                                                            5
                                                                                                                                                                                            뮹
                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-918-715-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 231
LENGTH: 5540
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No.:
                                                                                                                                                                                                                                                                                                      642
                                                                                                                                                                                                                                                                                                                                                         582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  222
                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                 702
                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             282 TTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41 GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrargGlyThrThrLeumetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 G1yG1nG1yG1yArgArgG1uAspG1yG1yProAlaCysTyrG1yG1yPheAspLeuTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGCAAGGGGGACGCAGGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTAC
      LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle
                                                LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                     CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                     ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                                                          GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTC
                                                                                                                                                         GluProSerThrI1eCy8AlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                                                                                                                        AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                                                                                                 CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                 GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                                                                                ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr
                                                                                                                                                                                                                                                                                                                                                         GCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAAT
                                                                                                                                                                                                                                                                                                                                                                         AlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                             AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAACAGT
                                                                                                                                                                                                                                                                                                       AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2.87e-185
1536.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     x US-09-918-715-231 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                295
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40
```

281 20

1001

941 240 88 220 821 200 180 701 160 641 140 583 120 521

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/301,822
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR FILING DATE: 2001-12-10
PRIOR FILING DATE: 2001-12-10
PRIOR REPLICATION NUMBER: US 60/361,978
PRIOR RETLING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR FILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
SOPTWARE: FRESEQ FOR WINDOWS Version 4.0
SEQ ID NO 198
LENGTH: 5540
TYPE: DNA
ORGANISM: HOMO Sapiens
                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
   밁
                           5
                                                                밁
                                                                                               á
                                                                                                                        8
                                                                                                                                                          5
                                                                                                                                                                                                밁
                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_27_321 (1-295) x
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; NAME/KEY: CDS
; LOCATION: (144)...(1838)
US-10-301-822-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-301-822-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 198, Application US/10301822
Publication No. US20030148410A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Millennium Pharmaceuticals,
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Thibodeau, Stephen N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT,
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MEMO1-029F2RNM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1062
     462
                                                                   402
                                                                                                                                 342
                                                                                                                                                                                                 282
                                                                                                                                                                                                                                                                222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          281
                                81
                                                                                                61
                                                                                                                                                              41
                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                GGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTAC
                      GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg 100
                                                                                   ThrArgGlyThrThrLeuMetLy8LeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                 GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                                                                                   GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
                                                                                                                                                                                                 TTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTTGTG
                                                                                                                                                                                                                    PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                                                                                                                                                                                 GlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCAGTTCTGTCATCACCACACACACACTGTTCTGACGGTTCC 1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerSerSerValIleIleThrThrThrHisCysSerAspGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAGAACTCCAGAAAGTT
                                                                                                                                                                                                                                                                                                                                                                          2.87e-185
1536.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                             US-10-301-822-198 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Inc.
                                                                                                                                                                                                                                                                                                                                                            5540
295
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PREVENTION,
                                                                                                80
                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1061
                                                                  461
                                                                                                                                 401
                                                                                                                                                               60
                                                                                                                                                                                                341
                                                                                                                                                                                                                                                              281
                                                                                                                                                                                         APPLICANT: CATEON-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 176
 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-474-794-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                Score:
                                                                                                Alignment Scores:
                                                                                                                                 US-10-474-794-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 176, Applic Publication No. US20 GENERAL INFORMATION:
                                                                                                                                             LENGTH: 5540
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                   Мо
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerSerSerValllelleThrThrThrHisCysSerAspGlySer 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/10474794
o. US20040213793A1
2.87e-185
1536.00
100.00%
100.00%
100.00%
8
               Length:
Matches:
Conservative:
Mismatches:
Indels:
     0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             581
```

761

```
RESULT 8
US-10-474-794-231
US-10-474-794-231
Sequence 231, Application US/10474794
Publication No. US20040213793A1
GENERAL INFORMATION:
APPLICANT: Carson-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL
PTITR REFERENCE: 1107.00179
                                                                                                                                                                                 δ
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                               ર્
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                             ક
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2_COPY_27_321 (1-295) x US-10-474-794-176 (1-5540)
                                                                                                                                                               밁
                                                                                                                                                                1062
                                                                                                                                                                                                              1002
                                                                                                                                                                                      281
                                                                                                                                                                                                                                      261
                                                                                                                                                                                                                                                              942
                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                              882
                                                                                                                                                                                                                                                                                                                                   221
                                                                                                                                                                                                                                                                                                                                                              822
                                                                                                                                                                                                                                                                                                                                                                                                            762
                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                            702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          222
                                                                                                                                                                                                                                                                                                                                                                                    201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                                                                                                                               LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle
                                                                                                                                                                                                                                                                             LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                                                                                                                                                                                                                                                            ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                                                                                                                                                                                                                                                                                           GluProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                          AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GluGluLeuGlnLy8ValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyr
                                                                                                                                                                              SerSerSerVallleIleThrThrThrHisCysSerAspGlySer 295
                                                                                                                                                                                                                                                             CTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTA
                                                                                                                                                                                                                                                                                                                                                              GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                             GCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                                                                                                TCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCC 1106
                                                                                                                                                                                                               AAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATC
                                                                                                                                                                                                                                                                                                               CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAAATCCGTCAAGGCCTA
                            EXPRESSION
                                                                                                                                                                                                                 1061
                                                                                                                                                                                                                                                              1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           281
                                                                                                                                                                                                                                      280
                                                                                                                                                                                                                                                                                                               941
                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                              881
                                                                                                                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                                                                                                                                                            821
                                                                                                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                                                            761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/474,79.
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILLING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILLING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
SOFTWARE: FastSEQ for Windows Version 4.1
SEQ ID NO 231
LENGTH: 5540
                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: DNA
; ORGANISM: Homo
US-10-474-794-231
                                                        S
                                                                                       밁
                                                                                                            Ş
                                                                                                                                       밁
                                                                                                                                                        S
                                                                                                                                                                                      밁
                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                Ş
                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No . .
                                                                                                                                                                                                                                                                                        582
                241
                                                               221
                                                                                                                201
                                                                                                                                        702
                                                                                                                                                                                                                 161
                                                                                                                                                                                                                                        642
                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                      522
                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                      462
                                                                                                                                                                                                                                                                                                                                                                                                                                      402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                        ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                     GluProSerThrI1eCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                                                                                                                   GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                       ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr
                                                                                                                                                                                                                                                                                        GCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAAT
                                                                                                                                                                                                                                                                                                     AlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                        AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIle
                                                                                                                                                                                                                                                                                                                                                                                      GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                                                                                                                                         AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2.87e-185
1536.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-474-794-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5540
295
0
                                                                                         CGTGAGAGGAAACGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                       463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               40
                                                                                          881
                                                                                                                                         821
                                                                                                                                                                200
                                                                                                                                                                                        761
                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                         701
                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                                                           641
                                                                                                                                                                                                                                                                                                               140
                                                                                                                                                                                                                                                                                                                                        581
                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                        521
                                                                                                                                                                                                                                                                                                                                                                                                               100
                                                                                                                                                                                                                                                                                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281
                                          941
                                                                 240
                                                                                                                 220
                    260
```

밁 δ Ś 8

밁

```
RESULT 99
US-10-79-159-176
; Sequence 176, Application US/10979159
; Publication No. US20050142138A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; LENGTH: 5540
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-979-159-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: US/09/918,715
PRIOR FILING DATE: 2001-08-01
PRIOR PPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR PRILING DATE: 2000-04-11
PRIOR FILING DATE: 2000-04-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 358
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/10/979,159
CURRENT FILING DATE: 2004-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelste
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1002
                                                     101
                                                                                                                                                    402
                                                                                                                                                                                                                   342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            261
                                                                                    462
                                                                                                                                                                                                                                                                                     282
                                                                                                                                                                                                                                                                                                                                                      222
                                                                                                                                                                                 61
                                                                                                                   81
                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                                                                                                                    21
                                                                                                                                                                                                                                                                                                                                                                                     -
                                       AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIle 120
                                                                                                                                                                                                                                      GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer 60
                                                                                                                                                                                                                                                                                                                                                    GGGCAAGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTAC
                                                                                                                                                                                                                                                                                                                                                                           GlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle 280
                                                                                                     GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                     ThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu 80
                                                                                                                                                                                                                   GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                                                                                                                                                                                                                                        PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCCGAGGAACAACCTTAATGAAACTGACAGAGACAGAGAACAAATCCGTCAAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerSerSerVallleIleThrThrThrHisCysSerAspGlySer 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTTTTTATC 1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.87e-185
1536.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                      ×
                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-979-159-176 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     5540
295
0
0
                                                                                                                                                                                                                                                                                                                    40
                                                                                  521
                                                                                                                                                  461
                                                                                                                                                                                                                 401
                                                                                                                                                                                                                                                                                   341
                                                                                                                                                                                                                                                                                                                                                    281
                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                               Alignment Scores: Pred. No.:
                                                                                                                                                                ; TYPE: DNA
; ORGANISM: Homo
US-10-979-159-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-979-159-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                               FILE REFERENCE: 1107.00134

CURRENT APPLICATION NUMBER: US/10/979,159

CURRENT FILING DATE: 2004-11-03

PRIOR APPLICATION NUMBER: US/09/918,715

PRIOR FILING DATE: 2001-08-01

PRIOR APPLICATION NUMBER: 60/222,599

PRIOR FILING DATE: 2000-08-02

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR APPLICATION NUMBER: 60/284,360

PRIOR APPLICATION NUMBER: 60/284,360

PRIOR APPLICATION NUMBER: 60/282,850
                                                                                                                                                                                                                                 SOFTWARE: Fa
SEQ ID NO 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 231, Appropriate Publication No.
                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 358
                                                                                                                                                                                                                                                                                     PRIOR FILING DATE:
                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       221
                                                                                                                                                                                                                 5540
                                                                                                                                                                                                                                                  FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/10979159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US20050142138A1
                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                   2000-04-11
                                              2.87e-185
1536.00
100.00%
100.00%
100.00%
```

ঠ

밁

á

밁

र् 밁

밁

밁 ઇ 밁 S

ঠ

```
GENERAL INFORMATION:
APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    141 ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 AlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerSerSerVallleIleThrThrThrHisCysSerAspGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCC 1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAAACGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACA
x US-10-979-159-231 (1-5540)
                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PATTERNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              701
```

밁

δ

```
Sequence 5, Application US/11047278

Publication No. US20050196407A1

GENERAL INFORMATION:
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745

CURRENT APPLICATION NUMBER: US/11/047,278
                                                                                                                                         RESULT 11
US-11-047-278-5
                                                                                                                                                                                                                                            1002
                                                                                                                                                                                                                 281
                                                                                                                                                                                                                                                                      261
                                                                                                                                                                                                                                                                                                  942
                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                        882
                                                                                                                                                                                                                                                                                                                                                                                    221
                                                                                                                                                                                                                                                                                                                                                                                                                822
                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                                                                                                   SerSerSerVallleIleThrThrThrHisCysSerAspGlySer 295
                                                                                                                                                                                                                                                            LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle
                                                                                                                                                                                                                                                                                                                    LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                  GluProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsmGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVallleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGCAAGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyr
                                                                                                                                                                                                                                                                                                                                                          CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                                                                                                                                                                                                          ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                                                                                                                                                                                                                                                                                                                                  GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTA
                                                                                                                                                                                     TCCAGTTCTGTCATCATCACCACCACACTGTTCTGACGGTTCC
                                                                                                                                                                                                                                             AAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTATC
                                                                                                                                                                                                                                                                                                    CTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Receptor
                                                                                                                                                                                                                                             1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                                                     1001
                                                                                                                                                                                                                                                                                                                                                          941
                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                  881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR PILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 5
LENGTH: 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; NAME/KEY: CDS
; LOCATION: (144)..(1835)
US-11-047-278-5
                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                    S
                                                                                                                                                                        밁
                                                                                                                                                                                             Ş
                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
     음 성
                                                문
                                                                             S
                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match:
     882
                                                                                      201
                                                                                                                                                                        702
                                                                                                                                                                                                    161
                                                                                                                                                                                                                                642
                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                        582
                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                              402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  222
                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                      ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                          GluProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                                               AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                        ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                  GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGACAAATCCGTCAAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGCAAGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyr
                                                            GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTC
                                                                                                                  GCTCTGCAAGGCATCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.87e-185
1536.00
100.00%
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-11-047-278-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5540
295
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (1-5540)
```

100

521

46 80 40 60 341

180

701

881 220 821 200 761

941

160

641

140 581 120 40

281 20

δ 멍 Ş ₽ Ş 밁 S 밁 र् 밁 S 밁 Ş 밁 S В Ş 밁 5 밁 δ 밁 S 밁 S В δ

밁

```
Sequence 17, Application US/10038307

Publication No. US20030134786A1

GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: UJUATEN J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Con
FILE REFERENCE: 7953-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 17
LENGTH: 1674
TYPE: DNA
ORGANISM: Homo Bapiens
US-10-038-307-17
                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
S
                      밁
                                           Ş
                                                                       밁
                                                                                           ঠ
                                                                                                                    밁
                                                                                                                                          Ş
                                                                                                                                                                      밁
                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                         ई
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                         ક
                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
US-10-038-307-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
0
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1062
                         451
                                              121
                                                                        391
                                                                                             101
                                                                                                                      331
                                                                                                                                                                      271
                                                                                                                                                                                                                      211
                                                                                                                                                                                                                                                                     151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
 141
                                                                                                                                              81
                                                                                                                                                                                                                                             41
                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                     91
                                                                                                                                                                                                                                                                                                                                            μ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ly9GluValGlyMetLy8AlaAlaLeuGlnValSerMetA8nA8pGlyLeuSerPheIle 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu 260
                                                                                     AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIle
                                                                                                                                     GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                    GluGlnLeuAlaHisLygPheIleSerProGlnLeuArgMetSerPheIleValPheSer
                                                                                                                                                                                                                                                                     TTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTG
                                                                                                                                                                                                                                                                                            PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                                                                                                                                                                                                                                   GlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerSerSerValllelleThrThrThrHisCysSerAspGlySer 295
ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr 160
                                       AlaLeuThrAapGlyGluLeuHisGluAapLeuPhePheTyrSerGluArgGluAlaAsn
                                                                     ThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                      GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATC 1061
                                                                                                                                                                                                                                                                                                                                                                                           1.39e-185
1532.00
100.00%
100.00%
100.00%
99.74%
                                                                                                                                                                                                                                                                                                                                                                   x US-10-038-307-17 (1-1674)
                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Compositions and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1106
                                              140
                                                                                               120
                                                                                                                      390
                                                                                                                                              100
                                                                                                                                                                                                                                                                                            40
                                                                        450
                                                                                                                                                                      330
                                                                                                                                                                                             80
                                                                                                                                                                                                                      270
                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                     210
                                                                                                                                                                                                                                                                                                                    150
                δ
                                              밁
                                                                    S
                                                                                             밁
                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
```

```
Query Match:
DB:
                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                          ; NUMBER OF SEQ ID NOS: 36

SOFTWARE: FASTSEQ for Windows Version

; SEQ ID NO 17

; LENGTH: 1674

; TYPE: DNA

; ORGANIZM: Homo sapiens

US-10-201-292-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 13
US-10-201-292-17
                                                                                                                                                                                                          US-09-970-076-2_COPY_27_321 (1-295) x US-10-201-292-17 (1-1674)
                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Undith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                         No.:
211
                                                                    151 TTCATTTTGGACAAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       931 TCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            281 SerSerSerValllelleThrThrThrHisCysSerAspGly 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             571 CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                    41 GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
                                                                                                      21
                                                                                                                                           91
                                                                                                                                                            1 GlyGlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyr
GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                       PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTCAATGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/10201292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US20030144193A1
                                                                                                                                                                                                                                              1.39e-185
1532.00
100.00%
100.00%
99.74%
                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                              1674
294
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                               60
                                                                                                    40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 280
270
                                                                    210
                                                                                                                                         150
                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  570
```

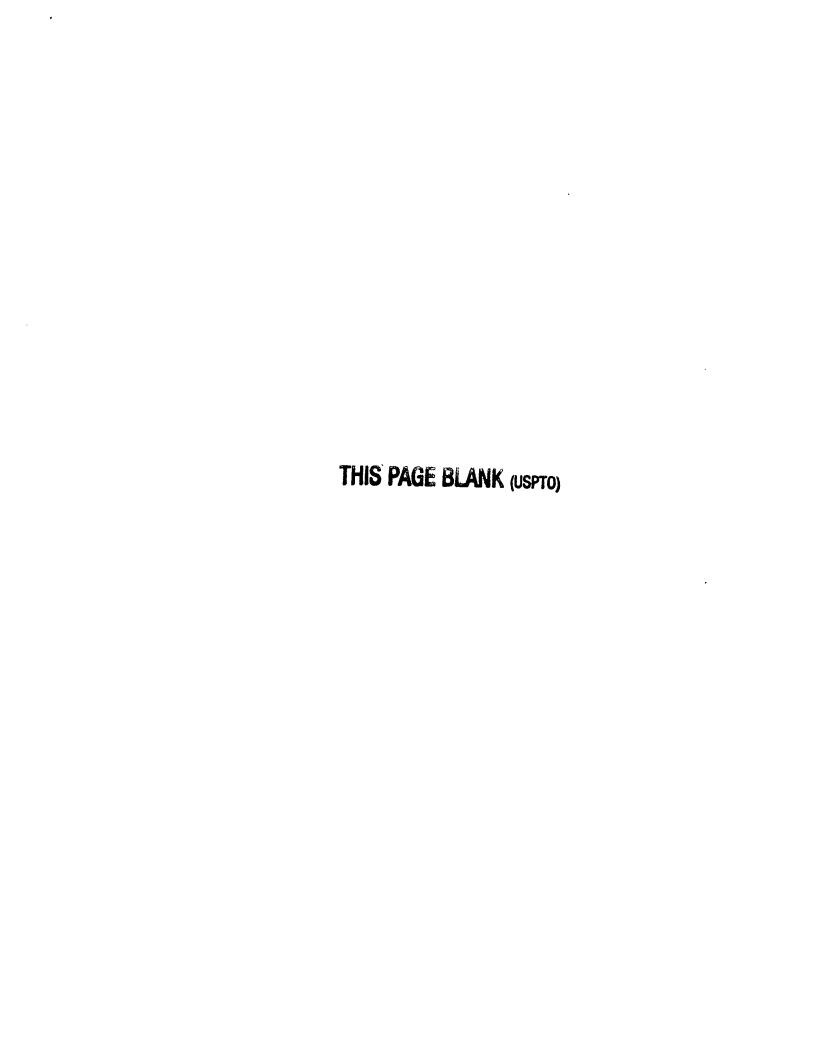
```
Sequence 13, Application US/10038307

; Sequence 13, Application US/20030134786A1
; GENERAL INFORMATION:
; APPLICANT: James B. ROTTMAN
; APPLICANT: Theresa L. O'KEEFE
; APPLICANT: Theresa L. O'KEEFE
; APPLICANT: JUGHT B. ROTTMAN
; APPLICANT: JUGHT J. HEALEY
; TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and
; FILE REFERENCE: 7853-253-999
; CURRENT APPLICATION NUMBER: US/10/038,307
; CURRENT FILING DATE: 2002-06-28
; NUMBER OF SEQ ID NOS: 26
; SOUTWARE: FRASTSEQ for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 1650
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-038-307-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
 Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                        RESULT 14
US-10-038-307-13
                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뭐
                                                                                                                                                                                                                                                                                                                                                           281
                                                                                                                                                                                                                                                                                                                                                                                    871
                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                       811
                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   271
                                                                                                                                                                                                                                                                                                                                   931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GluProSerThrIleCysAlaGlyGluSerPheGlnValValArgGlyAsnGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                   TCCAGTTCTGTCATCATCACCACACACACTGTTCTGACGGT 972
                                                                                                                                                                                                                                                                                                                                                  SerSerSerVallleIleThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                                                                                                                     LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTGAAAGATTTCAATGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGC
  3.52e-184
1521.00
  Length:
Matches:
  1650
293
                                                                                                                                                                                                                                                                                                                                                            294
                                                                                                                                                                                      and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   330
                                                                                                                                                                                                                                                                                                                                                                                                                                         870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100
                                                                                                                                                                                                                                                                                                                                                                                        930
                                                                                                                                                                                                                                                                                                                                                                                                               280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    630
RESULT 15
US-10-038-307-15
y Sequence 15, Application US/10038307
publication No. US20030134786A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                   S
                                                                                                                                        밁
                                                                                                                                                                  δ
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_27_321 (1-295)
                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     139
                                                                                                                                                859
                                                                                                                                                                                                                                                                                221
                                                                                                                                                                                                                                                                                                          679
                                                                                                                                                                                                                                                                                                                                                              619
                                                                                                                                                                                                                                                                                                                                                                                                                559
                                                                                                                                                                                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              259
                                                                                              919
                                                                                                                      281
                                                                                                                                                                           261
                                                                                                                                                                                                    799
                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                      739
                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyGlnGlyGlyArgArgCluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyr
                                                                                                           SerSerSerVallleIleThrThrThrHisCysSerAspGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGCAAGGGGACGCAGGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTAC
                                                                                                                                                                                                                                                                                                                        GluProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                                                                                                                                                                                                                                                                                          AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ArgSerArgAepLeuglyAlaIleValTyrCysValGlyValLysAspPheAsmGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCAGTTCTGTCATCATCACCACCACACACTGTTCTCCCCAAATCT
                                                                                                                                                 ANAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATC
                                                                                                                                                               LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle
                                                                                                                                                                                                     CTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTA
                                                                                                                                                                                                                   LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                                                                                                                                                                                         CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                                                                                                     ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr
                                                                                                                                                                                                                                                                                                          GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTC
                                                                                                                                                                                                                                                                                                                                                            GCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                               CAGCTGGCCCGGATTGCCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGACAAATCCGTCAAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrargGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99.32%
99.32%
99.02%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            x US-10-038-307-13 (1-1650)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0000
                                                                                                                         295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         138
                                                                                                                                                                           280
                                                                                                                                                                                                      858
                                                                                                                                                                                                                               260
                                                                                                                                                                                                                                                         798
                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                           738
                                                                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                                                                                                              678
                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                                   618
                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
```

```
; APPLICANT: Theresa L. U. ALL.;
; APPLICANT: Engin OZKAYNAK
; APPLICANT: Judith J. HEALEY
; TITLE OF INVENTION: Tango 197 and Tango 216 C
; FILE REFERENCE: 7853-53-999
; CURRENT APPLICATION NUMBER: US/10/038,307
; CURRENT FILING DATE: 2002-06-28
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 15
; ELNOTH: 1650
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-038-307-15
                                                                                                                   Ş
                                                                                                                                                 음 성 음
                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                   ર્
                                              밁
                                                                   ঠ
                                                                                          문
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                      ર્
                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_27_321 (1-295)
   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
Pred. No.:
                                                                                                  619
                                                                                                                                                    559
                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                   439
                                                                                                                                                                                                                                                                           121
                                                   679
                                                                                                                           181
                                                                                                                                                                           161
                                                                                                                                                                                                    499
                                                                                                                                                                                                                                                                                                     379
                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                       319
                                                                                                                                                                                                                                                                                                                                                                                                                                                        199
   739
                         221
                                                                          201
                                                                                                                                                                                                                                                                                                                                                                                                       259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        139
                                                                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                             13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 _
                                                                                                                                                                                                                                                   AlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn 140
                                                                                                                                                                                                                                                                                                   AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIle 120
                                                                                                                                                                                                                                                                                                                                                    GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
ArgHisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThr 240
                                                                                                                 AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                 GlnieuAlaArgIleAlaAspSeriysAspHisValPheProValAsnAspGlyPheGln 180
                                                                                                                                                                                                                  ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyGlnGlyGlyArgArgGluAspGlyGlyFroAlaCysTyrGlyGlyPheAspLeuTyr
                                                                            ဌ
                                                                                                                                                  CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                       ACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAGAACAAATCCGTCAAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                  ThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCAAGGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTAC 138
                                                                                                  GCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCT
                                                                                                                                                                                                    AGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTCAATGAGACA
                                                3.52e-184
1521.00
99.32*
99.32*
99.32*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tango 216 Compositions and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-038-307-15 (1-1650)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1650
293
0
2
                                                                                                  678
                                                                                                                          200
                                                                                                                                                    618
                                                                                                                                                                                                  558
                                                                                                                                                                                                                                                                                                                                                                                                     318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                 738
```

```
밁
                         Ś
                                                 밁
                                                                       δ
                                                                                                    밁
                                                                                                                      S
                                                    859
                         281
                                                                            261
                                                                                                    799
                                                                                                                              241
SerSerSerVallleIleThrThrThrHisCysSerAspGlySer 295
                                                               LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle
                                                                                                                  LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                    AAAGAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTATC
                                                                                                      CTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTA
                                                    918
                                                                                                    828
                                                                           280
```

Search completed: December 19, 2005, 02:09:54
Job time : 965.104 secs



```
-MODEL-frame+_p2n.model -DEV=xlh
-Q=/cgn2 1/USPTO_spool/US09970076/runat_14122005 111853_21065/app_query.fasta_1.2410
-DB=PublIshed_Applications_NA_New -QFMT=fastap -SUFFIX=rnpbn -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=blts -START=1 -END=-1 -MATRIX=blosum62
-TRANNS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=2000000000 -USER=US0970076 @CGN 1 1 675_@runat_14122005_111853_21065
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPEDP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Title:
Perfect score:
                                                                                                                                                                                                                          Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Command line parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                n
                                                                                     Ω
                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                                                                                                                           Pred. No.
    1536
145.5
131
122
113.5
113.5
113.5
                                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                             d. No. 18 the number of results predicted by chance to have a
re greater than or equal to the score of the result being printed,
18 derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               seq length:
seq length:
                                                                                                                                                                                                                                                                                                                                                                                           Published_Applications NA_New:*

1: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*

2: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

5: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*

7: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

10: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                              100.0
9.5
8.5
7.9
7.4
7.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           December 10, 2005, 07:41:36 ; Search time 238.049 Seconds (without alignments) 607.449 Million cell updates/sec
                                                                                                                                                                                                     Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_27_321
1536
                                                                                                                                                                                                                               Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4161431 seqs, 245089505 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GQGGRREDGGPACYGGFDLY.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Copyright
                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000000000
    5540
4740
11447
2834
1325
2501
3449
3564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                     BB
US-11-186-284-198

US-11-080-026-3

US-11-186-284-25

US-10-750-185-39040

US-10-750-185-56394

US-10-750-185-56394

US-10-821-234-182

US-10-131-826A-293

US-10-601-368-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GLSFISSSVIITTHCSDGS
Sequence 198, App
Sequence 3, Appli
Sequence 25, Appli
Sequence 39040, A
Sequence 56394, A
Sequence 182, App
Sequence 293, App
Sequence 20, Appl
                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1
US-11-186-284-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 198, Applic Publication No. US20 GENERAL INFORMATION:
```

## ALIGNMENTS

Application US/11186284 o. US20050266493A1

```
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Schlegel, Robert
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Millennium Pharmaceuticals, KITS, AND
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MEMOI-029P2RNM
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT APPLICATION NUMBER: US/10/301,822
PRIOR APPLICATION NUMBER: US 60/301,822
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 198
LENGTH: 5540
```

Sapiens

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores: Pred. No.: Score:
                       밁
                                          δ
                                                                      밁
                                                                                          S
                                                                                                                 밁
                                                                                                                                        δ
                                                                                                                                                                     밁
                                                                                                                                                                                        S
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2_COPY_27_321 (1-295) x US-11-186-284-198 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-11-186-284-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: CDS
LOCATION: (144)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo FEATURE:
                        1002
                                                                                                                                                                                                                                                                                                                                                                      582
                                                                      942
                                                                                              241
                                                                                                                       882
                                                                                                                                              221
                                                                                                                                                                       822
                                                                                                                                                                                              201
                                                                                                                                                                                                                        762
                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                      702
                                                                                                                                                                                                                                                                                                                     642
                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                       522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     222
                                              261
                                                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     282 TTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81 GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlyGlnGlyGlyArgArgGluAspGlyGlyFroAlaCysTyrGlyGlyFheAspLeuTyr
                                                                                                                                                                                                                                                                                                                     ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThr
                                                                                                                                                                                                                                                                                                                                                                      AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVall1eIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSer
                                                                                    LeuAsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeu
                                                                                                                                   ArgHisAlaArgAsnValAspArgValLeuCysSerPheLy8IleAsnAspSerValThr
                                                                                                                                                                                   GluProSerThrI1eCy8AlaGlyGluSerPheGlnValValValArgGlyAsnGlyPhe
                                                                                                                                                                                                                                     AlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAla
                                                                                                                                                                                                                                                                                     GlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheVal
                                     LysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIle
                                                                                                                                                                       GAACCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTC
                                                                                                                                                                                                                        GCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCT
                                                                                                                                                                                                                                                                       CAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAAATCCGTCAAGGCCTA
SerSerSerValllelleThrThrThrHisCysSerAspGlySer 295
                                                                        CTCAATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTA
                                                                                                                       CGACATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.42e-180
1536.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative:
Mismatches:
Indels:
Gaps:
                                                                       1001
                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                       701
                                                                                                                                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
                        1061
                                                                                                                       941
                                                                                                                                               240
                                                                                                                                                                       881
                                                                                                                                                                                                                        821
                                                                                                                                                                                                                                                200
                                                                                                                                                                                                                                                                      761
                                                                                                                                                                                                                                                                                                                                                                       641
                                                                                                                                                                                                                                                                                                                                                                                                                        581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     281
```

```
Sequence 3, Application US/11080026
Publication No. US20050260192A1
GENERAL INFORMATION:
APPLICANT: Springer, Timothy A.
APPLICANT: Shimaoka, Motomu
APPLICANT: Shimaoka, Motomu
APPLICANT: Shimaoka, Motomu
APPLICANT: Shimaoka, Motomu
APPLICANT: Shimaoka, Motomu
APPLICANT: Shimaoka, Motomu
APPLICANT: Shimaoka, Motomu
APPLICANT: Shimaoka, Motomu
APPLICANT: NUMBER: US/11/080,026
CURRENT APPLICATION UNMBER: US/11/080,026
CURRENT FILING DATE: 2005-03-15
PRIOR APPLICATION NUMBER: US/945,265
PRIOR APPLICATION NUMBER: US 60/229,700
PRIOR APPLICATION NUMBER: US 60/229,700
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 4740
                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                               뮍
                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 2
US-11-080-026-3
                       5
                                                             밁
                                                                                                á
                                                                                                                                    밁
                                                                                                                                                               S
                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2_COPY_27_321 (1-295) x US-11-080-026-3 (1-4740)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-11-080-026-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1062 TCCAGTTCTGTCATCATCACCACCACACACTGTTCTGACGGTTCC
                              162 LeuAlaArg------IleAlaAspSer-----LysAspHisValPhePro 174
                                                                                                                                                                                                       784 CTGTTTAACATCACCAACGGAGCCCGAAAGAATGCCTTTAAGATCCTAGTTGTCATCACG
                                                                                                                                                                                                                                                                                                                                                  670
                                                                                                                                                                                                                                                                                                                                                                                                                     625 ACCTTGTTCTCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             520 GACATTGCCTTCTTGATTGATGGCTCTGGTAGCATCATCCCACATGACTTTCGGCGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                 57 IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAsp------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            37 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe ::: ||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18 AspLeuTyrPheIleLeuAspLysSerGlySerValLeu---HisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                            85 LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
ANATCCCGCCAAGAGCTTAATACCÁTCGCÁTCCAAGCCGCCTCGTGÁTCACGTGTTCCAG
                                                                                                SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                    AspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsnArg
                                                                                                                                                                                                                                           IleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeuThr
                                                                                                                                                                                                                                                                             TTTACCTTCAAAGAGTTCCAGAACAACCCTAACCCAAGATCACTGGTGAAGCCAATAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGGAGTTTGTCTCAACT------GTGATGGAGCAATTAAAAAAGTCCAAA
                                                                                                                                                                                                                                                                                                                                                                                 1.22e-06
145.50
45.85%
26.20%
9.47%
                                                                 -GGAGTCATTCGCTACGTCATTGGGGTGGGAGATGCCTTCCGCAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                     -TTGATGCAGTACTCTGAAGAATTCCGGATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STABILIZED IN AND METHODS FO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4740
60
45
81
43
12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRODUCING SAME
                                                                                                     161
                                                                                                                                                                                                                                                                               783
                                                                                                                                                                                                                                                                                                                104
                                                                                                                                                                                                                                                                                                                                                  729
                                                                                                                                                                                                                                                                                                                                                                                       84
                                                                                                                                                                                                                                                                                                                                                                                                                       669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36
                                                                                                                                         903
                                                                                                                                                                          141
                                                                                                                                                                                                            843
                                                                                                                                                                                                                                               123
                                                                                                                                                                                                                                                                                                                                                                                                                                                        72
```

```
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT,
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MEMO1-029PZRMM
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2001-05-05
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2001-05-20
문
                            ક
                                                                          밁
                                                                                                            ş
                                                                                                                                                       밁
                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                       Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                           US-09-970-076-2_COPY_27_321 (1-295) x US-11-186-284-25 (1-11447)
                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 3
US-11-186-284-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: FABLS
SEQ ID NO 25
LENGTH: 11447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 25, Application US/11186284 Publication No. US20050266493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Millennium Pharmaceuticals, APPLICANT: Berger, Allison APPLICANT: Guillemette, Tracy L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 228
                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                       1318
  1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       175
                                    55
                                                                                                                37
                                                                                                                                                                                         18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kamatkar, Shubhangi
Schlegel, Robert
Monahan, John E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FastSEQ for Windows Version 4.0
AGTCTTGTGCAATACAGCCGGGATCCTCATACTGAGTTCACTTTGAAAAAATTCACCAAA 1497
                                                                                                      TyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro----GlnLeuArgMet 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGTCTCAGGAAGGCTTCAGCGCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys 194
                                  SerPheIleValPheSerThr------ArgGlyThrThrLeuMetLysLeuThrGlu 71
                                                                                                                                                   GATATTGTGTTTTTGGTTGATGGCTCCTATAGCATTGGGATTGCAAACTTTGTTAAAGTT 1377
                                                                                                                                                                                       AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ValArgGlyAsnGlyPheArgHisAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----ATCTTTGCGATCGAGGGTACTCAGACAGGAAGTAGCAGCTCCTTTGAGCATGAG 1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal 214
                                                                                                                                                                                                                                                                                                                                                                                                                                               (1)...(9192)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sapiene
                                                                                                                                                                                                                                                                       0.000304
131.00
48.99%
29.80%
8.53%
                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ASSESSMENT, PREVENTION,
                                                                                                                                                                                                                                                                       59
75
26
                                                                        1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1065
```

```
S
                                                                                                                               밁
S
                                        밁
                                                                                                                                                                     Ş
                                                                                                                                                                                                                US-09-970-076-2_COPY_27_321 (1-295) x US-10-750-185-39040 (1-2834)
                                                                                                                                                                                                                                                                               Query Match:
                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 4
US-10-750-185-39040/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                    Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-750-185-39040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 39040
LENGTH: 2834
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 39040, Application US/10750185 Publication No. US20050260603A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: HOLM, Tom
APPLICANT: BATES, Stephen
APPLICANT: BATES, Stephen
APPLICANT: PANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
FILE REFERENCE: MMII100-2
CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR PILING DATE: 2002-12-31
PRIOR PILING DATE: 2002-12-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 64922
SOFTWARE: PatentIN version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: MMI GENOMICS, INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Bovine
                                            2061 GCGATGAAGGTGTTCATGAATGAGGTGATAAAGATGTTCCACGTTGGACCGGAC---AGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1825 TCTTTTGAACTCACAGTCTATCTGCCTTAGAATTGAGCAAGAATTGGCAGCT 1878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      128 HisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAla 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           110 ArgGlnGlyTyrArgThr-----AlaSerValIleIleAlaLeuThrAspGlyGluLeu 127
                                                                                                                             90
  54 MetSerPheIleVal-PheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspAr 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        72
                                                                                  ---IleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerProGlnLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DeNISE, Sue K.
KERR, Richard
ROSENFELD, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTCCTGCAGAGACCCATGTGTTCACAGTGGAAGAT---TTTGATGCTTTTCAGAGGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAATCTTTGCAĞTTĞĞTĞTĞAAĞGATGCCGTTCGCTCAGAATTĞGAAGCTATTĞCCTCT 1767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleValTyrCysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAsp 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCATCAGATGCTTTC-----AGAGATCCTGCGATAAAACTGAGGAATTCAGATGTT 1707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAG----GGATCAAGAAGCAATGTGCCAAAGGTCATGATTCTTATCACGGATGGGAAA---- 1656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGATCTACAAATACTGGCAAAGCAATGACTTATGTCAGAGAGAAAATATTTGTGCCTAGC 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTTGAAGATATAATT--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuPro-----Gly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IleHisSerIleLeuLysLysSerCysIleGluIle-----LeuAlaAla 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----SerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIle 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                       19866880867914
                                                                                                                                                                                                                                                                            0.000475
122.00
50.00%
29.03%
7.94%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----GAAGCAATAAACACCTTCCCTTACAGAGGA 1542
                                                                                                                                                                                                                                                                            Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
                                                                                     53
```

```
FILE REFERENCE: MMII100-2
CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR FILING DATE: 2002-12-31
NUMBER OF SEQ ID NOS: 64922
SOFTWARE: PatentIN version 3.1
SEQ ID NO 56394
LENGTH: 1325
TYPE: DNA
ORGANISM: Bovine 19866880505724
US-10-750-185-56394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                           밁
                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                   S
                                                                                                                                                                                     Query Match:
DB:
                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-750-185-56394
                                                                                                                                        US-09-970-076-2_COPY_27_321 (1-295) x US-10-750-185-56394 (1-1325)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 56394, Application US/10750185 Publication No. US20050260603A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: MMI GENOMICS, INC.
APPLICANT: DENISE, SUE K.
APPLICANT: KERR, Richard
APPLICANT: ROSENFELD, David
APPLICANT: HOLM, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: BATES, Stephen
APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1944 CACTCCAGTGTGGCAGGCTTGGAGGTAGCCGTTGACAGCATCCAGCAG-----AAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1616 GGTACAAGACATCTGT 1601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1727 TTATGCAGTTGGAGTCAGAGATGCTAATATTGCTGAGCTTCAAGAGATTGCTGAA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  129 wAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleVa 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   109 nArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGl 129
                                                              456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    89
                                                                                                    10
                     29
Val---LeuHisHisTrpAsnGluIleTyrTyrPhe---ValGluGlnLeuAlaHisLys 46
                                                              GGGAGCGCCTGTGAGAACAAGCGAGCGGACGTGGTCTTTATCATTGACAGCTCACGCAGC 515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                eLeuLysLysSerCys 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  lTyrCysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLy 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCGGTG------GCTGATGCTGCAGAGGCGCTGAGGGGCCATGGAGTCACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCTCGCAGCAA-CGTGCCTT-GGTATCTCATTTGTTGTCACTGACGGCCAATCTATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    yGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAs 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gGluGlnIleArgGlnGlyLeuGlu------GluLeuGlnLysValLeuProGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGGGGCACCAAGATGGGTGAGGCCCTG---GGCAGCATGATCCAGGTCTTTGCAGACTC
                                                                                                  GlyProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySer 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -GACAGAATGTTTTTCGTGCATGAT--
                                                                                                                                                                                 0.00171
113.50
42.63%
23.11%
7.39%
                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -TTTGAGTCCTTGAAGACCATCCAACAAGAAGT
                                                                                                                                                                                     1325
58
49
93
51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
    Percent Similarity:
                                          Alignment Scores:
Pred. No.:
                                                                                                        US-10-821-234-182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-821-234-182/c
                                                                                                                                                                                     SOFTWARE: pt_SEQ_genes Version 1.0
SEQ_ID NO 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 182, Application US/10821234
Publication No. US20050255114A1
                                                                                                                                                                                                                                                                                                                                               APPLICANT: Labat, Ivan
APPLICANT: Stache-Crain, Birgit
APPLICANT: Andarmani, Susan
APPLICANT: Tang, Y. Tom
TITLE OF INVENTION: Methods for Diagnosis
                                                                                                                                                                                                                          FILE REFERENCE: 821A
CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR FILING DATE: 2003-04-07
NUMBER OF SEQ ID NOS: 1704
NUMBER OF SEQ ID NOS: 1704
                                                                                                                         LENGTH: 2501
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  966 CTGGTGGCCAAC---TTCAGCCAGATTGAGACGCTGACCTCAGTGTTCCAGAAGAAGTTG 1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      174 ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                846 GCCGAGGTGGCCCAAAAGCCCGGGACACAGGCATCCTGATCTTTGCCATCGGTGTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             213 ValValValArgGlyAsnGlyPheArgHisAla 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            202 ProSerThrIle-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   155 ---LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         136 GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   798 CCTCGGGTCATAATGATCGTGACTGATGGGAGGCCCCCAGGACTCGGTG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          116 AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     741 ---GCCCTGAACATCGCCTTCTCGGAAGCAGAGGGGGCCCGGCCCCTGAGGGAGAATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101 AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlγTyrArg------Thr 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  687 AAGAGGATGCGGCATCTGTCCACGGGCACCATGACGGGGCTGGCCATCCAGTAC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   627 GTCAAGAACGAGTTCTCCCTCAAGACCTTCAAGAGGAAGTCCGAGGTGGAGCGTGCCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    576 GACATTGGCCCTGACGTCACCCGTGTGGGTCTGCTCCAGTAT------GGCAGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 516 GTCAACACCCACGACTACGCAAAGGTCAAGGAGTTCATTGTGGACATCCTGCAGTTCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81 GluGluLeuGlnLy8ValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       47 PheIleSerProGlnLeu---ArgMetSerPheIleValPheSerThrArgGlyThrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          66 Leu-----MetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAAAGGTCGAG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTTCCCGGGTTCATTCTGTGCTACCTGGTCCCAAGTACTGTGCTGGCAAGGGGGTCTTTA 1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCAGTAAGTCCTGCTCCTCTGTGGCTCTTCTCGGGGCATCGTTGGGATGAGGTCATTCA 1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.00452
113.50
38.28%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -ATAAGACACAGT 1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----PysAlaGlyGluSerPheGln 212
                       Length:
Matches:
    Conservative:
                                                                                                                                                                                                                                                                                                                                                          and Treatment
                                                                                                                                                                                                                                                                                                                                                          of Preeclampsia
```

201

965

905 154 845 797

Query DB:

Best Local Similarity:

Match:

```
US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1631 GAAGGAGTCGATGCTGAGGATGGGCACGGCCCAGGGGAACAACAGAAGCGGAAGATCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AACCAAGTGAACATCAATGCTTTGGCTTCCAAGAAAGACAATGAGCAACATGTGTTCAAA 996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAGGCTGGAACCGCACCCGCCATGTCATCATCATGACTGATGGATTGCACAACATG 1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnGlyTyr---ArgThrAlaSerValIleIleAlaLeuThrAspGly------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCAGCAACTTCACAGGAGCCAAAAAGTGTCTAGTCAACTTAATTGAGAAGGTGGCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACCCTTCAGGCTCCATGAACATCTÁCCTGGTGCTÁGÁTGGATCÁGACÁGCATTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnGlyGlyArgArgGluAspGly---GlyProAla------
                                                                                                                                                                                                                  IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                                                                                                                    ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                    IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGly-----Val
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCGGGGACCCAATTACTGTCATTGATGAGATCCGGGACTTGCTATACATTGGCAAGGAT 1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg------ 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAATCAATTATGAAGACCACAAGTTGAAGTCAGGGACTAACACC------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluLeu-----GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuMetLysLeuThrGlu------AspArgGluGlnIleArgGlnGlyLeuGlu 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATGGTGTGAAGCCA-----AGATATGGTCTAGTGACATATGCCACATACCCCAAAAATT 1398
                                         AspGlyLeuSerPheIleSerSerSerVallleIleThrThrThrHisCys
                                                                                                                             CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCAAGGAT---ATGGAAAACCTGGAAGATGTTTTCTACCAAATGATCGATGAAAGC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGCAAAAACCCAAGGGAGGATTATCTGGATGTCTATGTGTTTTGGGGGTCGGGCCTTTGGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    --- AAGAAGGCCCTCCAGGCAGTGTACAGCATGATGAGCTGGCCAGATGACGTCCCTCCT 1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGGTCAAAGTGTCTGAAGCAGACAGCAGTAATGCAGACTGGGTCACGAAGCAGCTCAAT 1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHis 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal---
------GCTGTGGTGTCTGAGTACTTTGTGCTGACAGCAGCACATTGT
                                                                                                                                                                                                                                                             GGCATGGTTTGGGAACACAGGAAGGGTACCGAT------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19
                                                                                                                                                                      -----TACCACAAGCAACCATGGCAGGCCAAGATCTCAGTC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----GluLeuHisGluAspLeuPhePheTyrSerGlu 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9.58%
                                                                                    ATTCGCCCTTCAAAGGGACACGAGAGCTGTATGGGG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-821-234-182 (1-2501)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       109
99
17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1452
                                                                                                                                                                                                                                                                                                                                                                                             214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1512
                                                                                                                                274
                                                                                                                                                                                                                                                                                                         234
                                                                                                                                                                                                                                                                                                                                                                                                                                         942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                65
                                                                                    819
                                                                                                                                                                                                                                                                                                                                                    924
                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
                             S
                                                                                  밁
밁
                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Homo US-10-131-826A-293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 7
US-10-131-826A-293
                                                                                                                                                                    US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR APPLICATION NUMBER: 60/059113
PRIOR APPLICATION NUMBER: 60/059113
PRIOR APPLICATION NUMBER: 60/059115
PRIOR APPLICATION NUMBER: 60/059115
PRIOR APPLICATION NUMBER: 60/059117
PRIOR APPLICATION NUMBER: 60/059117
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Remaining Prior Application
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 293
LENGTH: 3449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 293, Appublication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/131,826A CURRENT FILING DATE: 2002-04-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Baker, Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/059588 FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/059122
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059184
FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/059263
FILING DATE: 1997-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/059352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1997-09-17
                                                                                    372
432 AAGGAGTTCATCGTGGACATCTTGCAATTCTTGGACATTGGTCCTGATGTCACCCGAGTG
                                         37
                                      TyrTyrPhe----ValGluGlnLeuAlaHisLysPheIleSerProGlnLeu----ArgMet
                                                                                  GACCTGGTTTTCATCATTGACAGCTCTCGCAGTGTCAACACCCCATGACTATGCAAAGGTC
                                                                                                                           AspleuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Godowski, Paul J. Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Watanabe, Colin K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stewart, Timothy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Beresini, Maureen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DeForge,Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/10131826A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŪS20050245730A1
                                                                                                                                                                                                                                                                                                                                                                                                                  Sapien
                                                                                                                                                                                                                                  0.0074
113.50
43.90%
22.36%
7.39%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ۳.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                data removed -
                                                                                                                                                                      x US-10-131-826A-293 (1-3449)
                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
                                                                                                                                                                                                                                      Mismatches:
Indels:
                                                                                                                                                                                                                  Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           See File Wrapper
                                                                                                                                                                                                                3449
55
53
103
35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                o
r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AND NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PALM
                                      54
                                                                                  431
                                                                                                                             36
  49
```

र् 밁 Ş

111

1292

98

밁

1235

1115

137

1055

1175

१

82

밁

1337

ફ

66

밁

Ś 밁 Ś 밁 S 밁 S

46

1511

1571

13

N

30

밁

1451

용 ð

밁 ঠ

818

275

S 문 á

235

문

990

8 밁 S 문 Ś 망 ঠ 밁 ঠ

밁

```
; ORGANISM: Mus musculus
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(3564)
US-10-601-368-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-601-368-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
                                                                                                                                                                             SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 20 LENGTH: 3564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1047 CTGTGTGCCATGGAGGAC 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     603 ACCATGACTGGGCCATCCAGTAT------GCCCTGAACATCGCATTCTCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    543 TTCAAGAGGAAGTCCGAGGTGGAGCGTGTCAAGAGGATGCGGCATCTGTCCACGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          223 AlaArg-------AsnValAspArgValLeuCysSerPheLysIleAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    183 GlnGlyIleIleHisSerIleLeuLγsLγsCerCγsIleGluIleLeuAlaAlaGluPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              145 LeuGlyAlaIleValTyrCysValGlyVal-----LysAspPheAsnGluThrGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      714 GGGAGACCTCAGGACTCCGTG------GCCGAGGTGGCTGCTAAGGCACGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       70 ThrGluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGAGGGGCCCCGGCCCCTGAGGGAGAATGTGCCACGGGTCATAATGATCGTGACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCAAACAAGGCTACATTCTCAACTCGGATCAGACGACTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGCATAACTGTGCC-----CACTTCTGCATCAACATCCCTGGCTCATACGTCTGCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCCTGCTCCAATAT-----ĠĠĊAGCÁĊTGTCAAGAATGAGTTCTCCCTCÁÁĠACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerPheIleValPheSerThrArgGlyThrThrLeu------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerValThrLeuAsnGlu 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArgHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGACGCTGACCTCCGTGTTCCAGAAGAAGTTGTGCACGGCCCACATGTGCAGCACCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTGGGAGTGAGCCCCATGAGGACCATGTCTTCCTTGTGGCCAAT---TTCAGCCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACGGGCATCCTAATCTTTGCCATTGGTGTGGGCCCAGGTAGACTTCAACACCTTGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ArgGlnGlyTyrArg------ThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn
  0.016
  Length:
  3564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---AGAATCCAGGAT 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----MetLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                    RESULT 9
US-10-601-368-19
1S-10-601-368-19
; Sequence 19, Application US/10601368
; Publication No. US20050260702A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score:
                                                            SOPTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 19
                                                                                               CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-66-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR PILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                           APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
  TYPE: DNA ORGANISM: MUS
                                         LENGTH: 4858
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1054 TTGGAAGGC 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1003 GAGGCGGCCCTG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         475 TGCCAGACTTACATGGACATCGTCATTGTCTTAGATGGCTCCAACAGCATC---TACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182 LeuGlnGly 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  592 CAGATCCAGGTCGGAATAGTCCAGTATGGAGAAGATGCCGTCCATGAGTTCCACCTT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            943 AATGAAATCAAATACATCGCCAGCGACCCTGACGACAAGCACTTCTTCAACGTCACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               146 GlyAlarlevalTyrCysValGlyValLysAsp-----PheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              128 HisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   709 GGGACAGAGCCCGCACGGCATTTGGCATTGAATTTGCACGCTCGGAGGCTTTCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TACGCTGTGGCCGTTTTGGGCTACTACAACCGCAGGGGGATCAATCCAGAGACTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGGAAGAAAGGGCCAAG-----AAAGTGATGATTGTCATCACGGACGGGAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeu 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGGTGGAGGTCCAACACTTCCTCATCAATATCCTCAAAAAGTTCTACATTGGCCCCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACGACAGCCCAGACCTGGAGAAGGTGATCCGGCAGAGCGAGAAGGACCAACGTGACCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               СувТугGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ------LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
    musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 111.00
37.93%
24.14%
7.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGGACATTGTTGATGCCCTTGGGGACAGGATCTTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         x US-10-601-368-20 (1-3564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9 3 8 8 9
9 8 8 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ......
```

1002

161 942 145 882

130

822

107

708 90 648 70 591 50

768

```
RESULT
US-10-9
                                                                                                                                                                                          용
                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
Sequence 464, Application US/10995561
Publication No. US20050272054A1
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: DETECTION AND USES THEREOF
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CL001559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT APPLICATION NUMBER: US/10/995,561
NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FABESEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY: CDS
LOCATION: (28
S-10-601-368-19
                                                                                                                                                      SULT 10
-10-995-561-464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                           1030
                                                                                                                                                                                            1081
                                                                                                                                                                                                                  182
                                                                                                                                                                                                                                                                                            970
                                                                                                                                                                                                                                                                                                                    146
                                                                                                                                                                                                                                                                                                                                                                    131
                                                                                                                                                                                                                                                                                                                                                                                             850
                                                                                                                                                                                                                                                                                                                                                                                                                      128
                                                                                                                                                                                                                                                                    162
                                                                                                                                                                                                                                                                                                                                                                                                                                               796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13
                                                                                                                                                                                         TTGGAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
(28)...
                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTGGAAGAAAAGGGGCCAAG-----AAAGTGATGATTGTCATCACGGACGGGGAATCC
                                                                                                                                                                                                                 LeuGlnGly 184
                                                                                                                                                                                                                                           GAGGCGGCCCTG---
                                                                                                                                                                                                                                                                 LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 181
                                                                                                                                                                                                                                                                                                                   GlyAlaIleValTyrCysValGlyValLysAsp-----PheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                             CACGACAGCCCAGACCTGGAGAAGGTGATCCGGCAGAGCGAGAAGGACAACGTGACCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                  HisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeu 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGACAGAGCCCGCACGGCATTTGGCATTGAATTTGCACGCTCGGAGGCTTTCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGly 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr 70
                                                                                                                                                                                                                                                                                          AATGAAATCAAATACATCGCCAGCGACCCTGACGACAAGCACTTCTTCAACGTCACAGAT
                                                                                                                                                                                                                                                                                                                                           TACGCTGTGGCCGTTTTGGGCTACTACAACCGCAGGGGGATCAATCCAGAGACTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                   -----LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGATCCAGGTCGGAATAGTCCAGTATGGAGAAGATGCCGTCCATGAGTTCCACCTT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGGTGGAGGTCCAACACTTCCTCATCAATATCCTCAAAAAGTTCTACATTGGCCCCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCCAGACTTACATGGACATCGTCATTGTCTTAGATGGCTCCAACAGCATC---TACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (3591)
                                                                                                                                                                                          1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.0257
111.00
37.93%
24.14%
7.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
                                                                                                                                                                                                                                           AAGGACATTGTTGATGCCCTTGGGGACAGGATCTTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-601-368-19 (1-4858)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4858
28
38
                                                                             METHODS
                                                                                                                                                                                                                                                                                           1029
                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                             909
                                                                                                                                                                                                                                                                                                                                                                                                                                               849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         50
                                                                                                                                                                                                                                                                                                                                                                                                                      130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 675
                                                                             ç
                                                                                                                                                                             밁
                                                                                                                                                                                              S
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                          당
                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
```

```
; Sequence 465, Application US/10995561
; Publication No. US2005072054A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC FOLYMORPHISMS ASSOCIATED WITH; TITLE OF INVENTION: DETECTION AND USES THEREOF; TITLE OF INVENTION: DETECTION AND USES THEREOF; FILE REFERENCE: CLO01559
; CURRENT APPLICATION NUMBER: US/10/995,561
; CURRENT PILING DATE: 2004-11-24
; NUMBER OF SEQ ID NOS: 85702
                                                                                                                                                                                                    RESULT 11
US-10-995-561-465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA
; ORGANISM: Homo
US-10-995-561-464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO
                                                                                                                                                                                                                                                                                               191
                                                                                                                                                                                                                                                                                                                                 759
                                                                                                                                                                                                                                                                                                                                                                   174
                                                                                                                                                                                                                                                                                                                                                                                                         711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .30
                                                                                                                                                                                                                                                           619
                                                                                                                                                                                                                                                                                                                                                                                                                                          156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           464
3175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGACCAGGTGGCGCTGAGCTGGCGCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGTACTTCGTGCTGGACACCTCGGAGAGAGCGTCACCATGCAGTCCCCCACGGACATCCTG
                                                                                                                                                                                                                                                         AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAAATC
                                                                                                                                                                                                                                                                                                                                   ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATCAAGGTCATG
                                                                                                                                                                                                                                                                                                                                                                  ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                        AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGGCATCCGGCCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuGlyAlaIleValTyrCysVal-------GlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCCGGCAGGACCGCAGCAAGGGC-----ACCGTCCACTTCGCCGTCGTCATCACCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerProGlnLeuArgMetSerPhe-------IleValPheSerThrArgGlyThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuTyrPheIleLeuAspLysSerGlySerVal------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCCACGTCACCGGCAGCCCCTGCGGGGGCATCAAGCTGCAGGCCGAGCGGGCCCGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTTCCGCCGCGC-----ACCTTCACCGACTGCGCGCTGGCCAACATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                         ĠĂĊATCGCCAGCĂĊĠCCGCACGAGĊŤĊTACĊĠĊ------AACGĂĊTACGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.0366
107.50
40.28%
23.15%
7.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    x US-10-995-561-464 (1-3175)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                          rystyssercysileGluile
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3175
50
37
84
45
                                                                                                               KITH
                                                                                            RESPONSE,
                                                                                                                                                                                                                                                           866
                                                                                                                                                                                                                                                                                             197
                                                                                              METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                           173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48
                                                                                                                                                                                                                                                                                                                                   818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29
                                                                                              Q
```

(1 - 3468)

29

```
US-10-995-561-466

J. Sequence 466, Application US/10995561

Publication No. US20050272054A1

GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-995-561-465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FASTSEQ
SEQ ID NO 465
LENGTH: 3464
 APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RES
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CLOO1559
CURRENT APPLICATION UNDER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 3464
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                              819
                                                                                                                                                                                                                                              191
                                                                                                                                                                                                                                                                          759
                                                                                                                                                                                                                                                                                                                                         711
                                                                                                                                                                                                                                                                                                                                                                       156
                                                                                                                                                                                                                                                                                                                                                                                                      651
                                                                                                                                                                                                                                                                                                                                                                                                                                    145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGTACTTCGTGCTGGACACCTCGGAGAGCGTCACCATGCAGTCCCCCACGGACATCCTG
                                                                                                                                                                                                             AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                      GAGGGCATCCGGCTCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerProGlnLeuArgMetSerPhe------IleValPheSerThrArgGlyThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuTyrPheIleLeuAspLysSerGlySerVal------
                                                                                                                                                                                                                                                                                                          ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu------
                                                                                                                                                                                                                                                                                                                                                                     AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuGlyAlaIleValTyrCysVal-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCCACGTCACCGGCAGCCCCTGCGGGGGCCATCAAGCTGCAGGCCGAGCCGGGCCCGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCCGGCAGGACCGCAGCAAGGGC-----ACCGTCCACTTCGCCGTGGTCATCACCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCTTCCGCCGCGC-----ACCTTCACCGACTGCGCGCTGGCCAACATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACCAGGTGGCGCTGAGCTGGCGCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG
                                                                                                                                                                                                                                                                            ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATCAAGGTCATG
                                                                                                                                                                                                                                                                                                                                         GÁCATCGCCAGCÁCGCCGCACGAGCTCTACCGC--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.0418
107.50
40.28%
23.15%
7.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     x US-10-995-561-465 (1-3464)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                           ---LysLysSerCysIleGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3464
37
84
95
                                                                  RESPONSE,
                                                                                                                                                                                                                                                                                                                                         -AACGACTACGCCACC
                                                                                                                                                                                                                                              197
                                                                                                                                                                                                              966
                                                                                                                                                                                                                                                                                                                                                                                                                                  -GlyvalLys
                                                                  METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               482
                                                                                                                                                                                                                                                                                                           190
                                                                                                                                                                                                                                                                                                                                                                                                                                    155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29
                                                                   얶
; Sequence 2, Application US/10601368
; Publication No. US20050260702A1
; GENERAL INFORMATION:
; APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
; TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUE
; FILE REFERENCE: 07334-275001
; CURRENT APPLICATION NUMBER: US/10/601,368
; CURRENT FILING DATE: 2003-06-23
                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                              RESULT 13
US-10-601-368-2
                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_27_321 (1-295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo US-10-995-561-466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FRASTSEQ for Windows Version
SEQ ID NO 466
LENGTH: 3468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            303
                                                                                                                                                                                                819
                                                                                                                                                                                                                                                                                                                                                                                         651
                                                                                                                                                                                                                                                                                                                                                                                                                     145 LeuGlyAlaIleValTyrCysVal--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30 LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19 LeuTyrPheIleLeuAspLysSerGlySerVal----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGTACTTCGTGCTGGACACCTCGGAGAGAGCGTCACCATGCAGTCCCCCACGGACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGTTCAGCCCACCGGGCAGCGÁCCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                                                                                                                                                                                AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAAATC
                                                                                                                                                                                                                                                                                           ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu------
                                                                                                                                                                                                                                                                                                                          GACATCGCCAGCÁCGCCGCACGAGCTCTACCGC--
                                                                                                                                                                                                                                                                                                                                                          AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                       GAGGGCATCCGGCTCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCCACGTCACCGGCAGCCCCCTGCGGGGGCATCAAGCTGCAGGCCGAGCGGGCCCGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCGGCAGGACCGCAGCAAGGGC-----ACCGTCCACTTCGCCGTGGTCATCACCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCTTCCGCCGCGC-----ACCTTCACCGACTGCGCGCTGGCCAACATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGACCAGGTGGCGCTGAGCTGGCGCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerProGlnLeuArgMetSerPhe------IleValPheSerThrArgGlyThr
                                                                                                                                                                                                                                                             ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATCAAGGTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.0419
107.50
40.28%
23.15%
7.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-995-561-466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.0
                                                                                                                                                                                                                            rystysSerCysIleGluIle
                                                      TINDBUS
                                                    AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3468
50
37
84
45
```

USES

THEREOF

-- AACGACTACGCCACC

758 173

190

818

-ĢļұVаlLув

155

144

650

124 536 104 482

422

64

84

362 48

```
RESULT 14
US-11-000-463-574
; Sequence 574, Application US/11000463
; Publication No. US20050266423A1
                                                                                                                                       Ś
                                                                                                                                                                               8
                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            श
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity: Best Local Similarity:
                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2_COPY_27_321 (1-295) x US-10-601-368-2 (1-3564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; NAME/KEY: CDS
; LOCATION: (1)...(3564)
US-10-601-368-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FASCSEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 3564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                   1003 GAGGCTGCCTTG---
                                                                                                                                           182 LeuGlnGly 184
                                                                                                                                                                                                                      162
                                                                                                                                                                                                                                                                                                                                                                               131
                                                                                                                                                                                                                                                                                                                                                                                                                     823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                                                            AATGAAATCAAATACATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGAT
                                                                                                                                                                                                                                                                                            GlyAlaIleValTyrCysValGlyValLysAsp------PheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                       TATGCGGTGGCCGTCCTGGGCTACTACAACCGCAGGGGGATCAATCCAGAAACTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTGGAAGGAAGCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCCAGACCTACATGGACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCC
                                                                                                       CTGGAAGGC
                                                                                                                                                                                                                      LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 181
                                                                                                                                                                                                                                                                                                                                                                                                                   CACGACAGCCCAGACCTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                          HisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GluAsnArgGlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeu 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAACAGAGACCCGGACGGCATTTGGCATTGAATTTGCACGCTCAGAGGCTTTCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGATCCAGGTTGGAGTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGGTGGAGGTTCAGCACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
                                                                                                                                                                                                                                                                                                                                                                           -----LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
                                                                                                       1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.0504
107.00
37.93%
24.14%
6.97%
                                                                                                                                                                                   AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3564
28
38
                                                                                                                                                                                   1053
                                                                                                                                                                                                                                                            1002
                                                                                                                                                                                                                                                                                                                                                                               145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               591
                                                                                                                                                                                                                                                                                                                                         942
                                                                                                                                                                                                                                                                                                                                                                                                                     882
                                                                                                                                                                                                                                                                                                                                                                                                                                                          130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  32
                                          밁
                                                                                S
                                                                                                                       밁
                                                                                                                                                     S
                                                                                                                                                                                                   문
                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                             ৪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2_COPY_27_321 (1-295) x US-11-000-463-574 (1-3967)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens
US-11-000-463-574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 785CIPACION (CURRENT APPLICATION NUMBER: US/11/000,463)
CURRENT FILING DATE: 2004-11-29
PRIOR APPLICATION NUMBER: 10/291,265
PRIOR FILING DATE: 2002-11-08
PRIOR FILING DATE: 2002-11-08
PRIOR PILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR FILING DATE: 2001-08-03
PRIOR FILING DATE: 2001-08-03
PRIOR PILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR PILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR PILING DATE: 2000-09-17
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR PILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; GENERAL INFORMATION:
; APPLICANT: Tang, Y Tom
; APPLICANT: Liu, Chenghua
; APPLICANT: Asundi, Vinod
; APPLICANT: Chen, Rui-hong
; APPLICANT: Qian, Xiaohong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 574
LENGTH: 3967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Zhang, Jie
APPLICANT: Zhou, Ping
APPLICANT: Cao, Yi-Cheng
APPLICANT: Cao, Yi-Cheng
TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        No.:
                                                                                                                                                                                                     641 CAGATCCAGGTTGGAGTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---
                                                                                                                                                                                                                                                                                                                                                         581 TGGGTGGAGGTTCAGCACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                        524 TGCCAGACCTACATGGACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCC
      128 HisGluAsp---
                                                                                                                                                             91 AspThrTyrMetHisGluGlyPheGlu------ArgAlaSerGluGlnIleTyrTyr
                                                                                                                                                                                                                                        71 GluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                  51 GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr 70
                                                                                                                                                                                                                                                                                                                                                                                             33 TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13 CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
                                            GGTGGAAGGAAAGGAGCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCC
                                                                            GluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeu
                                                                                                                         GGAACAGAGACCCGGACGGCATTTGGCATTGAATTTGCACGCTCAGAGGCTTTCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chen, Rui-hong
Qian, Xiaohong
Wang, Zhiwei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wehrman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.0595
107.00
37.93%
24.14%
6.97%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ₩.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
```

127

817 107 757 90 697 32

```
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR FILING DATE: 2000-09-15
NUMBER OF SEQ ID NOS: 944
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 102
LENGTH: 3969
TYPE: DNA
PERSONDER: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides
FILE REFERENCE: 785CTP4CN
CURRENT APPLICATION NUMBER: US/11/000,463
CURRENT FILING DATE: 2004-11-29
PRIOR APPLICATION NUMBER: 10/291,265
PRIOR FILING DATE: 2002-11-08
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: PCT/US01/02623
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/922,279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 15
US-11-000-463-102

; Sequence 102, Application US/11000463
; Publication No. US20050266423A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                            Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
US-09-970-076-2_COPY_27_321 (1-295) x US-11-000-463-102 (1-3969)
                                                                                                                                                                                                     ; NAME/KEY: CDS
; LOCATION: (52)..(3618)
US-11-000-463-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 09/491,404
PRIOR FILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR FILING DATE: 2000-07-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 09/631,451 FILING DATE: 2000-08-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1052 GAGGCTGCCTTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           162 LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     992 AATGAAÁTCAAATÁCATCGCCAGTGACCCTGÁTGACAAGCACTTCTTCÁÁTGTCACTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        146 GlyAlarleValTyrCysValGlyValLysAsp-------pheAsnGluThrGln 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   932 TATGCGGTGGCCGTCCTGGGCTACTACAACCGCAGGGGGATCAATCCAGAAACTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             872 CACGACAGCCCAGACCTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 182 LeuGlnGly 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGAAGGC 1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zhang, Jie
Zhou, Ping
Cao, Yi-Cheng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qian, Xiaoho
Wang, Zhiwei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wehrman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chen, Rui-hong
Qian, Xiaohong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Liu, Chenghua
Asundi, Vinod
                                                                                                                                                                                                                                                                                                                                                                    for Windows Version 3.0
                                                   0.0595
107.00
37.93%
24.14%
6.97%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        - AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGC
                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                               3969
28
88
38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 931
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                             S
                                                                멍
                                                                                                δ
                                                                                                                                        밁
                                                                                                                                                                    Ş
                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                            吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
뭉
1105 CTGGAAGGC 1113
                                                                    1054 GAGGCTGCCTTG-
                                                                                                  162 LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                526 TGCCAGACCTACATGGACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCC
                                 182 LeuGlnGly 184
                                                                                                                                                                          146 GlyAlaIleValTyrCysValGlyValLysAsp------
                                                                                                                                                                                                             934 TATGCGGTGGCCGTCCTGGGCTACTACAACCGCAGGGGGGATCAATCCAGAAACTTTTCTA
                                                                                                                                                                                                                                                                                                                    128 HisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                       108 GluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeu 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  643 CAGATCCAGGTTGGAGTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---
                                                                                                                                        994 AATGAAATCAAATACATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                            760 GGAACAGAGACCCGGACGGCATTTGGCATTTGAATTTGCACGCTCAGAGGCTTTCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          51 GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13
                                                                                                                                                                                                                                                                                                                                                                                                                                                               91 AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr 107
                                                                                                                                                                                                                                                                                                                                                      GTGGAAGGAAAGGAGCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCC
                                                                                                                                                                                                                                                  -----LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
                                                                                                                                                                                                                                                                                     CACGACAGCCCAGACCTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGA 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGGTGGAGGTTCAGCACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCCAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CyaTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
                                                                      AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGC
                                                                                                                                                                      -PheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                        1104
                                                                                                                                                                                                                                                                                                                                                                                                                              819
                                                                                                                                                                               161
                                                                                                                                                                                                                 993
                                                                                                                                                                                                                                                    145
                                                                                                                                                                                                                                                                                                                        130
                                                                                                                                                                                                                                                                                                                                                           873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       90
```

Search completed: December 19, 2005, 02:29:47
Job time : 260.049 secs

Run

9:

옻

Sequence:

Minimum DB Maximum DB

Database

Sequence

55, Appl 55, Appl 55, Appl 55, Appl 55, Appl 55, Appl 55, Appl 55, Appl 55, Appl 57, Appl 2, Appl 2, Appl 2, Appl 2, Appl 2, Appl 2, Appl 2, Appl 2, Appl 2, Appl

Sequence

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score
                166
159.5
159.5
159.5
159.5
159.5
159.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, g derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    572060 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-2_COPY_28_320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 December 14,
                100.55.59
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
110.55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/laa/5_COMB.pep:*

2: /cgn2_6/ptodata/1/laa/H_COMB.pep:*

3: /cgn2_6/ptodata/1/laa/PCTUS_COMB.pep:*

4: /cgn2_6/ptodata/1/laa/RE_COMB.pep:*

5: /cgn2_6/ptodata/1/laa/RE_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QGGRREDGGPACYGGFDLYF.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Copyright
                GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2005, 11:02:37; Search time 26.4228 Seconds (without alignments) 916.781 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82675679 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gapext 0.5
              US-10-104-047-2639
US-08-286-89-46
US-08-362-652-46
US-08-362-652-46
US-08-605-672-46
US-08-482-293A-46
US-09-193-043-46
US-09-193-043-46
US-09-193-052-53
US-08-485-618-53
US-08-605-672-53
US-08-943-63-53
US-08-943-37-53
US-08-943-37-37
US-08-943-37-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-363-37
US-08-943-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ltd
                                                    Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                  293
              99, Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Apoli Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/104,047
; CURRENT FILING DATE: 2002-03-25
; PRIOR APPLICATION NUMBER:
; PRIOR FILING DATE:
; PRIOR FILING DATE:
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 2639
; LENGTH: 488
; TYPE: PAT
; ORGANISM: Homo sapiens
US-10-104-047-2639
RESULT 2
US-08-286-889-46
IS-08-286-889-46; Application US/08286889
Patent No. 5470953
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                     S
                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1
US-10-104-047-2639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2639, Application US/10104047 Patent No. 6943241 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: HELIX RESEARCH INSTITUTE TITLE OF INVENTION: No. 6943241el full length FILE REFERENCE: H1-A0105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             159.5
159.5
159.5
159.5
159.5
159.5
159.5
156
156
156
156
156
                                                                                                                                                         275
                                                                                                                                                                                250 TYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG 293
                                                                                                                                                                                                                                       215
                                                                                                                                                                                                                                                                                                                     155
                                                                                                                                                                                                                                                                                                                                              130 LFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSIL 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   153;
                                                                                                                                                                                                                                                                                                                                                                                                     97
                                                                                                                                                                                                                                                                                                                                                                                                                                             70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10 PACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLT
                                                                                                                                                           NSMLCPAPILNKAGETLDVSVSFNGGKSVISGSLIVTATECSNG
                                                                                                                                                                                                                                       AQSCTEILELQPSSVCVGEEFQIVLSGRGFMLGSRNGSVLCTYTVNETYTTSVKPVSVQL
                                                                                                                                                                                                                                                                                                                     VPSYAEKEAKISRSLGASVYCVGVLDFEQAQLERIADSKEQVFPVKGGFQALKGIINSIL
                                                                                                                                                                                                                                                                                                                                                                                                                            EDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHED 129
                                                                                                                                                                                                                                                                             KKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVED
                                                                                                                                                                                                                                                                                                                                                                                                       GDRGKISKGLEDLKRVSPVGETYIHEGLKLANEQI--QKAGGLKTSSIIIALTDGKLDGL 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PSCRRAFDLYFVLDKSGSVANNWIEIYNFVQQLAERFVSPEMRLSFIVFSSQATIILPLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ilarity 53.9
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1100.55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1161
11161
11161
11161
11161
11161
11161
11161
11161
11161
11161
11161
11161
11161
11161
11161
11161
11161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    51.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;; Score 786; DB 2; Les; Pred. No. 1.7e-78; 54; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-485-618-55
US-08-362-552-55
US-08-605-672-55
US-08-482-293A-55
US-08-943-363-55
US-09-193-043-55
US-09-688-307A-55
US-09-188-307A-55
US-09-188-307A-55
US-09-188-307A-55
US-08-485-618-2
US-08-485-618-2
US-08-485-618-2
US-08-485-672-2
US-08-605-672-2
US-08-605-672-9
US-08-605-672-9
US-08-482-293A-99
US-08-482-293A-99
US-08-482-293A-99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
```

N

96

69

274 249 214 Regult

8core

18

```
S
                                                                                                                                                                                                                           US-08-485-618-46
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-286-889-46
                                                                                                                                                                                   Sequence 46, Application US/08485618 Patent No. 5728533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., JOSEPh A.
REGISTRATION NUMBER: P38,659
REFERENCE/DOCKET NUMBER: 27866/
TELECHMUNICATION INFORMATION:
TELEPHANE: 312-474-6300
TELEFAX: 312-474-0448
                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amino aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                 APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTICN: No. 5728533el NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: NO. NUMBER OF SEQUENCES: 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            / Match 10.9%; Score 166; DB 1; I Local Similarity 28.2%; Pred. No. 6.5e-09; 1es 66; Conservative 42; Mismatches 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 0 FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                316
                                                                                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
Chicago
                                                                                                                                                                                                                                                                                                                KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                     PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVVRGNGFRHARNVD 226
                                                                                                                                                                                                                                                                                                                                                                                                                                      TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI----ADSKDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK
                                                                                                                                                                                                                                                                                                                                                                                               TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Van der Vieren, Monica
VENTION: No. 5470953el Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gallatin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W. Mich
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       46:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27866/32168
                                                                                                      Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 1155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 Integrin Alpha Subunit
                                                                                                        N
                                                                                                      Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                        172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                  315
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                     뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                               US-08-362-652-46
                                                                                                                                                                                                                                                                                                                          吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-485-618-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLILING DATE:
CLASSIFICATION: 435
CLASSIFICATION DATA:
PRIOR APPLICATION NUMBER: US 08/173,497
APPLICATION NUMBER: US 08/286,899
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
PRIOR APPLICATION DATE: 5-AUG-1994
PTILING DATE: 5-AUG-1994
                                                                                                                                                                                    Sequence 46, Application US/08362652
Patent No. 5766850
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'To
STREET: 233 South Wacker
                                                                                                              APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5766850el NUMBER OF SEQUENCES: 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 21-DEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Williams Jr., Joseph REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: 312-474-63
TELEFAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: Illinois
COUNTRY: United States
                   STATE:
                                         CITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
 COUNTRY:
                                                                                                                                                                                                                                                                                                                          316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                               173 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVVRGNGFRHARNVD 226
                                                                                                                                                                                                                                                                                                                                                                                                     259
                                                                                                                                                                                                                                                                                                                                                                                                                                      122 TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 68 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60606-6402
                   Chicago
: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                                                                                                                                                                     TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US 08/362,652
                                                       O'Toole, Gerstein, Murray & Borun
cker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 166; DB 1;
Pred. No. 6.5e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                   Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 1155;
                                                                                                                                 2 Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                   Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30;
```

60606-6402

```
RESULT 5
US-08-605-672-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-362-652-46
                                                                                                                                                                                                                                                                                                        Sequence 46, Application US/08605672
Patent No. 5817515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
                                                                                                        APPLICANT: Van ....
APPLICANT: Van ....
TITLE OF INVENTION: NO. 581/52...
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSE: Marshall, O'Toole, Gerstein, Murray & Borun
ADDRESSEE: Marshall, O'Toole, 6300 Sear Tower
                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                            APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5817515el
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPAX: 25-3856
COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 1155 amir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                        COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
es 66; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  173
                                                                                                                                                                                                                                                                                                                                                                                                                               316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10 PACYG-GFDLYFILDKSGSV-LHHWNBIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LTEDR----EQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 121
                                                                                                                                                                                                                                                                                                                                                                                                                           KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TDGQKFRDPLEYRHVIPEAEKA----GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          46:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 166; DB 1;
Pred. No. 6.5e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 1155;
                                                                                                                                                                                                                                2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96; Indels 30;
                                                                                                                                                                                                                                Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12
```

```
US-08-482-293A-46
                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-605-672-46
                                                                                                                                                                                                                                                                                                                                             Sequence 46, Application US/08482293A
Patent No. 5831029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/3268
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                               STREET: 225
CITY: Chicago
CITY: Illinois
Thited
                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
ADDRESSEE: Marshall, Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                 APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: NO. 5831029el Human NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 530
PRIOR APPLICATION DATA:
US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 5-AUG-1 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                   ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    173 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              66;
                                                                                                                 RY: United States 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10.9%; Score 166; DB 1; Length 1155; 28.2%; Pred. No. 6.5e-09; tive 42; Mismatches 96; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       46:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27866/32684
                     Version
                                                                                                                                                                                                                                                                       2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                           US-08-943-363-46
                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-482-293A-46
                                                                                                                                                                                                                                                                                                                                                                  Sequence 46, Appli
Patent No. 5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY, AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
ADDRESSEE: Marshall, O'Toole, Garstein, Murray & Borun
                                                                                                                                                                                                                                                                  APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5837478el Human
NUMBER OF SEQUENCES: 114
             SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/943,36
                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
COPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                   STREET: 233 St
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 08/362,652 FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                         COUNTRY:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204 FTEFKSSLSPQSLVDAIVQLQ----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66;
                                                                                                                                               60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
)GY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF
                                                                                                                                                                                                                                                                                                                                                                                      Application US/08943363
                                                                                                                                                                                    Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        312-474-0448
                                                                                                                                                               United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/08/482,293A
                 US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    46:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 166; DB 1; Length 1155;
Pred. No. 6.5e-09;
2; Mismatches 96; Indels 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27866/32684
                                                     Version
                                                                                                                                                                                                                                                                                             2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
US-09-193-043-46
```

```
; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-943-363-46
                                                                                                                                                                                                  APPLICANT: Gallatin, Michael W.
APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 6251395el Human 2
FILE REFERENCE: 27866/35004
CURRENT APPLICATION NUMBER: US/09/193,043
CURRENT FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1994-08-08/286,889
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/352,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 8
US-09-193-043-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 46, Application US/09193043
Patent No. 6251395
                                                                  SOFTWARE: PatentIn Ver. SEQ ID NO 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1155 amino aci
                                                                                                                      EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                     EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/
EARLIER FILING DATE: 1994-12-21
                                                                                                                   NUMBER OF SEQ
                        TYPE: PRT
ORGANISM: Mus musculus
                                            LENGTH: 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Williams Jr., Joseph REGISTRATION NUMBER: 38,659 REFERENCE/DOCKET NUMBER: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 08/362,652 FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122 TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1155 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   46:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 166; DB 1;
Pred. No. 6.5e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ?7866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 1155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30;
```

172 258

```
र्
                                                                                                                     ঠ
                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: PRT
; ORGANISM: Mus
US-09-688-307A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 9
US-09-688-307A-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
유
                                                                              8
                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Pater
SEQ ID NO 46
LENGTH: 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 46, Application US/09688307A Patent No. 6432404 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 6432404el Human Beta-2
FILE REFERENCE: 27866/36646
CURRENT APPLICATION NUMBER: US/09/688,307A
CURRENT FILING DATE: 2000-10-13
PRIOR APPLICATION NUMBER: 09/193,043
PRIOR FILING DATE: 1998-11-16
PRIOR FILING DATE: 1998-11-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 08/173,497
PRIOR TILING DATE: 1993-12-23
PRIOR APPLICATION NUMBER: 08/286,889
PRIOR FILING DATE: 1994-08-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1997-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 08/362,652 PRIOR FILING DATE: 1994-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 08/605,672 PRIOR FILING DATE: 1996-02-22
316
                                         173
                                                                                                                       122
                                                                                                                                                                                                                                                  144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   144
                                                                              259
                                                                                                                                                                204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66;
                                                                                                                                                                                                         89
                                                                                                                                                                                                                                                                        10 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10
                                                                                                                                                                                                                                                                                                                                   66;
                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PatentIn Ver.
                                    PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 226
                                                                                                                                                                                                     LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 121
                                                                                                                                                                                                                                                  PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 67
                                                                                                                       TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 121
KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                              TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                      musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1997-10-03
                                                                                                                                                                                                                                                                                                                                                    10.9%; Score 166; DB 2; Length 1155; 28.2%; Pred. No. 6.5e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10.9%; Score 166; DB 2; Length 1155;
28.2%; Pred. No. 6.5e-09;
tive 42; Mismatches 96; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08/943,363
                                                                                                                                                                                                                                                                                                                                   42;
                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                   96;
                                                                                                                                                                                                                                                                                                                                 Indels 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30;
                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                              67
```

```
RESULT 11
US-08-485-618-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 10
US-09-350-259-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-350-259-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/193,043
EARLIER FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/94,363
EARLIER APPLICATION NUMBER: 08/94,363
EARLIER FILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                         Sequence 53, Application US/08485618
Patent No. 5728533
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 46, Appl
Patent No. 662091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Gallatin, Michael APPLICANT: Van der Vieren, I TITLB OF INVENTION: NO. 6620 FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/350,259
CURRENT FILING DATE: 1999-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 1155
TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                      STREET: 225
STREET: Chicago
CITY: Chicago
Illinois
"Thited
                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                      APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5728533el Human 2 Integrin Alpha Subunit
SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                     COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     173 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LTEDR-----EQIRQGLESLQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TDGQKFRDPLEYRHVIPEAEKA----GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/09350259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10.9%; Score 166; DB 2; Length 1155;
28.2%; Pred. No. 6.5e-09;
tive 42; Mismatches 96; Indels 3
                                                                                                                                                                                                                                                                                                     103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6620915el Human 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monica
                     Version
                     #
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 364
```

```
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-362-652-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-485-618-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 66; Conserv
                                                                                                                                                                                                                                                                                                                                                                                Patent No. 5766850
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 53, Application US/08362652 Patent No. 5766850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                               NERAL INFORMATION: W. MICHAEL
APPLICANT: Van der Vieren, Monica
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5766850el Human
TITLE OF PROMENCES: 93
        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                         NUMBER OF CORRESONDENCE ADDRESS:

CORRESPONDENCE ADDRESS:

ADDRESSEE: Marchall, O'Toole, Gerstein, Murray & Borun

ADDRESSEE: Marchall, O'Toole, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: 312-474-63
TELEFAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 08/362,652 FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 08/286,889 FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                        COUNTRY:
FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   173 PVNDGFQALQGIIHSILKKSCIEILAABPSTICAGESFQVVVRGNGFRHARNVD 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 68 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 67
                                                                                                                                                              60606-6402
                                                                                                                                                                                                                    Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-3856
                                                                                                                                                                                                 Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1161 amino acids
                                                                                                                                                                              United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 166; DB 1;
Pred. No. 6.5e-09;
                                                                                                                                                                                                                                                                                                                       2 Integrin Alpha Subunit
                                                        #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           258
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-605-672-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-362-652-53
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 53, Application US/08605672
Patent No. 5817515
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5817515el
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
    PRILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 08/28(
PILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAMB: Williams Jr., JOSeph, A
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                STREET: Chicago
CITY: Chicago
Illinois
Thited
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 0 FILING DATE: 23-DEC-1993 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                              CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall,
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: 312-4.
TELEPHONE: 312-474-0448
                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                    COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                316 KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        173 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             68 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1161 amino acids
                                                                                                                                                                                                                                                                                                                              233 South Wacker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10.9%;
                                                                                                                                                                                                                                                                                                                                                                                      103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US 08/173,497
                                                                                                                US/08/605,672
                                                                                                                                                                                                                                                                                                                              O'Toole, Gerstein, Murray & Borun
cker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           53:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 166; DB 1;
Pred. No. 6.5e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                                                                                                        2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12
```

```
RESULT 14
US-08-482-293A-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-605-672-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 53, Application US/08482293A Patent No. 5831029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5831029el Human
NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/362,6

FILING DATE: 21-DEC-1994

ATTORNEY/AGENT INFORMATION:

NAME: W1111ams Jr., Joseph A.

REGISTRATION NUMBER: 38,659

REFERENCE/DOCKET NUMBER: 27866/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS LENGTH: 1161 amino ac
                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC COMPATIBLE
COMPUTER: ISM PC COMPATIBLE
COMPUTER: PSTEM: PC-DOS/MS-DOS
SOFTWARE: PSTEMIN Release #1.0,
CURRENT APPLICATION DATA;
                                                                                                                                                                                                                                                                                                              STREET: STREET: Chicago
CITY: Chicago
Illinois
Inted
Inted
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: protein
                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPAX: 31.
TELEPAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: 312-474-0448
                                                                                                                       CLASSIFICATION:
                                                                                                                                            APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                  ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          173 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FTEFKSSLSPQSLVDAIVOLO-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSFQHEMSQEGFSSALSMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1161 amino acida
                                                                                                                                                                                                                                                                                                                                                                           233 South Wacker Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                           Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US 08/362,652
                                                                                                                                                        US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 166; DB 1; Length 1161;
Pred. No. 6.5e-09;
12; Mismatches 96; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27866/32684
                                                                                                                                                                                                                                                                                                                                                                             6300 Sear Tower
                                                                                                                                                                                                 Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 Integrin Alpha Subunit
                                                                                                                                                                                                 #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
```

```
US-08-943-363-53
; Sequence 53, Applications
; Patent No. 5837478
; GENERAL INFORMATION:
; APPLICANT: Gallations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-482-293A-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 10.9%;
Best Local Similarity 28.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                   CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                   MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                             ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS: ADDRESSEE: Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 0: FILING DATE: 21-DEC-1994 ATTORNEY/AGENT INFORMATION: NAME: Williams Jr., Joses
APPLICATION NUMBER: US (FILING DATE: 5-AUG-1994 PRIOR APPLICATION DATA: APPLICATION NUMBER: US (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                                                                                                                                                                      APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                STATE:
                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                   CITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           204 FTEFKSSLSPQSLVDAIVQLQ-----GLTYTASGIQKVVKELFHSKNGARKSAKKILIVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        144 PECPGQEMDIAFLIDGSGSIDQSDFTQMKDFVKALMGQLASTSTSFSLMQYSNILKTHFT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 PACYG-GFDLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMK 67
                                                                                                                                                                                                                                                                                                                                                              Chicago
: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3, Application US/08943363
5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KVGN-FVALRSIQRQIQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVD 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TDGQKFRDPLEYRHVIPEAEKA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 172
                                                                                                                                                                                                                                                                                                                                                                                                   233 South
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1161 amino acids
                                                                                                                                                                                                                                                                                                                                            United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gallatin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein
                                                                                                                                                                                                                                                                                                                                                                                                     Wacker Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W. Michael
                                                       US 08/286,889
 US 08/362,652
                                                                                                                                                                                         US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                       O'Toole, Gerstein, Murray & Borur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 166; DB 1; Le
Pred. No. 6.5e-09;
Pred. No. 6.5e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -GITRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
                                                                                                                                                                                                                                                                                                                                                                                                       6300 Sear Tower
                                                                                                                                                                                                                               Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12
```

```
; FILING DATE: 21-DEC-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Williams Jr., Joseph A.
REGISTRATION UNMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32684
FILLECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
TELEFAX: 312-474-0448
TELEFAX: 92-3856
INFORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                              밁
Search completed: December 14, 2005, 11:21:06 Job time : 27.4228 secs
                                                                                                                            ঠ
                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 10.9%; Score 166; DB 1; Length 1161; Best Local Similarity 28.2%; Pred. No. 6.5e-09; Matches 66; Conservative 42; Mismatches 96; Indels 30; Gaps
                                                                                         316 KVGN-FVALRSTQRQTQEK----IFAIEGTESRSSSSFQHEMSQEGFSSALSMD 364
                                                                                                                          173 PVNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVVRGNGFRHARNVD 226
                                                                                                                                                                                  259
                                                                                                                                                                                                       122 TDGELHEDLFFYSB--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVF 172
                                                                                                                                                                                                                                                                         68 LTEDR-----EQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIAL 121
                                                                                                                                                                                  TDGQKFRDPLEYRHVIPEAEKA---GIIRYAIGVGDAFREPTALQELNTIGSAPSQDHVF
```

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM protein - protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query
Match
       100.0
100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
1100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Published Applications AA Main:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2_COPY_28_320
1526
1 QGGRREDGGPACYGGFDLYF......DGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   December 14, 2005, 11:18:07 ; Search time 88.2719 Seconds (without alignments)
1386.897 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1867569 seqs, 417829326 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
         멂
                          US-11-047-278-2
US-09-833-245-621
US-09-833-07-18
US-10-201-292-18
US-10-201-292-18
US-10-301-822-199
US-10-408-765A-1823
US-10-408-765A-1823
US-10-474-794-232
US-10-979-159-187
US-10-979-159-232
US-11-047-278-6
US-09-78-620
US-09-78-620
US-01-201-292-2
US-11-047-278-8
US-11-047-278-8
US-11-038-307-2
US-11-038-307-2
US-11-038-307-2
US-11-038-307-2
US-11-038-307-2
US-11-038-307-2
US-11-038-307-2
US-10-201-292-24
US-10-038-307-20
US-09-918-715-194
US-10-474-794-301
US-10-474-794-301
US-10-474-794-301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
Sequence 2, Appli
Sequence 121, Appli
Sequence 18, Appli
Sequence 18, Appli
Sequence 187, Appli
Sequence 199, Appli
Sequence 197, Appli
Sequence 187, Appli
Sequence 232, Appli
Sequence 232, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 24, Appli
Sequence 24, Appli
Sequence 24, Appli
Sequence 27, Appli
Sequence 27, Appli
Sequence 27, Appli
Sequence 27, Appli
Sequence 27, Appli
Sequence 27, Appli
Sequence 28, Appli
Sequence 29, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 20, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
Sequence 21, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/11047278

Publication No. US20050196407A1

GENERAL INFORMATION:
APPLICANT: Young, John A.T.
APPLICANT: Eradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745

CURRENT APPLICATION NUMBER: US/11/047,278

CURRENT FILING DATE: 2005-01-31

PRIOR APPLICATION NUMBER: US/99/970,076

PRIOR APPLICATION NUMBER: US/99/970,076

PRIOR APPLICATION NUMBER: 05/251,481

PRIOR APPLICATION NUMBER: 06/251,481

PRIOR FILING DATE: 2000-12-05

NUMBER OF ERQ ID NOS: 10

SOFTWARE: PATENTIN OS: 10

SOFTWARE: PATENTIN OS: 10
                                                                                         δ
                                                                                                                                            밁
                                                                                                                                                                             Ş
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; LENGTH: 368
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-047-278-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1
US-11-047-278-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 293;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                268
                                                                                                   241
                                                                                                                                                                           181 LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                          148
                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                   88
                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                            28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   h 100.0%; Score 1526; DB 6; Similarity 100.0%; Pred. No. 1.1e-147; 93; Conservative 0; Mismatches 0;
                                                       NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTHCSDG
                                                                               NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                   LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                     LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQA 180
                                                                                                                                                                                                                                                                                                                                 RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                              RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA 120
                                                                                                                                                                                                                                                                                                                                                                                                                            QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                     QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     998.4
998.4
998.3
997.8
997.8
997.8
997.8
997.8
997.8
997.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-979-159-301
US-10-038-307-26
US-10-038-307-22
US-10-201-292-26
US-10-201-292-14
US-10-201-292-16
US-10-201-292-16
US-10-201-292-10
US-10-201-292-10
US-10-201-292-12
US-10-201-292-13
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-38
US-10-201-292-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 368;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
```

0;

Gaps

0

147

87

320 293

> 267 240

Regult No.

Score

22222222111111111

Minimum DB Maximum DB

Database

Title: Perfect score:

Run on:

Scoring table: Sequence:

```
Sequence 18, Application US/10038307

Publication No. US20030134786A1

GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: JUGHTH J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
SOFTMARE: FASTISEQ for Windows Version 4.0
SEQ ID NO 18
LENGTH: 551
TYPE: PRT
ORGANISM: Homo Bapiens
US-10-038-307-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/833,245
CURRENT PILING DATE: 2001-04-12
PRIOR APPLICATION NUMBER: 60/229, 358
PRIOR FILING DATE: 2000-04-12
PRIOR FILING DATE: 2000-04-12
PRIOR FILING DATE: 2000-0256, 931
PRIOR FILING DATE: 2000-12-21
PRIOR FILING DATE: 2000-12-21
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR FILING DATE: 2000-04-25
NUMBER OF SEQ ID NOS: 2267
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: PRT ; ORGANISM: Homo sapiens US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-038-307-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 621, Application US/09833245
Publication No. US20040010134A1
GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF546PCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 293; Conserv
Query Match
Best Local Similarity
Matches 293; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 1526; DB 3;
100.0%; Pred. No. 1.2e-147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
  0,
Score 1526; DB 4
Pred. No. 2e-147;
; Mismatches 0
                                    DB 4;
  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                      Length
                                        551;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         87
  0,
RESULT 5
US-09-918-715-187
; Sequence 187, Application US/09918715
; Publication No. US20030017157A1
; GENERAL INFORMATION:
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 4
US-10-201-292-18
                                                                       밁
                                                                                                       Ş
                                                                                                                                              밁
                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Homo sapiens US-10-201-292-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: James B. ROTTMAN
APPLICANT: Theres L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-99
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 18
LENGTH: 551
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18, Applica Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                    241 NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                         208
                                                                                             181 LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                148 LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQA
                                                                                                                                                                  121 LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                  293;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28
                                                                                                                                                                                                                   88 RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                        61 RGTTLMKLTEDREQIRQGLEBLQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                          28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                          QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                 QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/10201292
                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US20030144193A1
                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 1526; DB 4; 100.0%; Pred. No. 2e-147; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                   551;
                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           293
   320
                                     293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                207
                                                                                                                                                                                   180
                                                                                                                                                                                                                       147
                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                              87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                87
                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                  0
```

APPLICANT: Brad St. Croix

```
GENERAL INFORMATION:

APPLICANT: Bard St. Croix

APPLICANT: Bert Vogelstein

APPLICANT: Kenneth Kinzler

ITITE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS

FILE REFERENCE: 1107.00136

CURRENT APPLICATION NUMBER: 60/222,599

PRIOR APPLICATION NUMBER: 60/222,599

PRIOR FILING DATE: 2000-08-02

PRIOR PILING DATE: 2000-08-11

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR PILING DATE: 2000-08-11

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR PILING DATE: 2000-04-11

INUMBER OF SEQ ID NOS: 358

SOFTWARE: FASTSEQ for Windows Version 3.0

SEQ ID NO 232

LENGTH: 564

TYPE: PRT

ORGANISM: Homo sapiens

US-09-918-715-232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/09/918,715
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-01
PRIOR FILING DATE: 2000-08-01
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR PILING DATE: 2000-04-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
US-09-918-715-232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-918-715-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 232, Application US/09918715 Publication No. US20030017157A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity Matches 293; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 358
SOFTWARE: FASTSEQ for Windows
SEQ ID NO 187
LENGTH: 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \mathbf{\mu}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSPISSSVIITTTHCSDG 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1526; DB 3;
Pred. No. 2e-147;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3
```

```
S
                                 δ
                                                                             밁
                                                                                                                                                            밁
                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 7
US-10-301-822-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo Sapiens
US-10-301-822-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/301,822
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR PILING DATE: 2002-05-20
                                                                                                                                                                                                                                                Query Match 100.0%; Score 1526; DB 4; Best Local Similarity 100.0%; Pred. No. 2e-147; Matches 293; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ for Windows Version SEQ ID NO 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 199, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy
APPLICANT: Guillemette, Tracy
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Schlegel, Robert
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPMOI-029PERRM
TEBERT AND TOTAL NITHERE, NO COLON CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Millennium Pharmaceuticals, APPLICANT: Berger, Allison APPLICANT: Guillemette, Tracy L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 228
                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 564
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION
148
                      121 LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA 180
                                                                                                                       61
                                                                                                                                                                28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               293;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                     RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA 120
                                                                                                                                                            QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLKMSFIVFST
                                                                                                                                                                                         QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LQGI IHS ILKKSCI EI LAAEPSTI CAGES FQVVVRGNGFRHARNVDRVLCS FKINDS VTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QGGRREDGGPACYGGPDLYFILDKSGSVLHHWNBIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/10301822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US20030148410A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Pred. No. 2e-147; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                Gaps
                                                                             147
                                                                                                                                                                87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AND
```

```
APPLICANT: Fahy, Eoin D.
APPLICANT: Fahy, Eoin D.
APPLICANT: Zhang, Bing
APPLICANT: Zhang, Bing
APPLICANT: Zhang, Bing
APPLICANT: Zhang, Bing
APPLICANT: Taylor, Steven W.
APPLICANT: Taylor, Steven W.
APPLICANT: Glenn, Gary M.
APPLICANT: Glenn, Gary M.
APPLICANT: Glenn, Gary M.
APPLICANT: Harnock, Dale E.
TITLE OF INVENTION: TARGETS FOR THERAPEUTIC INTERVENTION
TITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOMI
TITLE REFERENCE: 660088.465
CURRENT APPLICATION NUMBER: US/10/408,765A
CURRENT FILING DATE: 2003-04-04
NUMBER OF SEQ ID NOS: 3077
NUMBER OF SEQ ID NOS: 3077
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 1823
LENGTH: 564
TYPE: PRT
ORGANISM: Homo Bapiens
US-10-408-765A-1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 8
US-10-408-765A-1823
; Sequence 1823, Application US/10408765A
; Publication No. US20040101874A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                           RESULT 9
US-10-474-794-187
                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 293
                                                                                                                                                                                                      Sequence 187, Application US/10474794
Publication No. US20040213793A1
GENERAL INFORMATION:
APPLICANT: Carson-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107,00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                               208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           h 100.0%; Score 1526; DB 4
Similarity 100.0%; Pred. No. 2e-147;
93; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG 293
                                                                                                                                                                                                                                                                                                                                                                                               NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                               LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 4; Length 564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROTEOME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
```

```
APPLICANT: Carson-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107,00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/308,850
PRIOR FILING DATE: 2001-04-11
PRIOR FILING DATE: 2001-08-01
INUMBER OF SEG ID NOS: 359
PRIOR FILING DATE: 2001-08-01
INUMBER OF SEG ID NOS: 359
PRIOR FILING DATE: 2001-08-01
INUMBER OF SEG ID NOS: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens US-10-474-794-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                         Ş
                                                                       밁
                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-474-794-232
밁
                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens 
US-10-474-794-232
                                                                                                                                                                                                                                                                  SEQ ID NO 232
LENGTH: 564
TYPE: PRT
                                                                                                                                                  Query Match
Best Local S
Matches 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 187
LENGTH: 564
TYPB: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 232, Appublication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Match 100.0%; Score 1526; DB 4; Local Similarity 100.0%; Pred. No. 2e-147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                268 NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            208 LOGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   148 LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                293;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88 RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28
88
                                     61
                                                                         28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                h 100.0%; Score 1526; DB 4; Similarity 100.0%; Pred. No. 2e-147; 93; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                     RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA 120
                                                                         QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                           QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
 RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/10474794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US20040213793A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                    Indels
                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         564;
                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       207
                                                                               87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

```
FILE REFERENCE: 1107.00134

CURRENT APPLICATION NUMBER: US/10/979,159

CURRENT FILING DATE: 2004-11-03

PRIOR APPLICATION NUMBER: US/99/918,715

PRIOR APPLICATION NUMBER: 60/222,599

PRIOR PILING DATE: 2000-08-01

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR FILING DATE: 2000-08-01

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR FILING DATE: 2000-08-11

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR FILING DATE: 2000-04-11

NUMBER OF SEQ ID NOS: 358

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 187

LENGTH: 564

TYPE: PRT

ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 11
US-10-979-159-187
Sequence 187, Applicat
Publication No. US2005
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                           RESULT 12
US-10-979-159-232
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                           ક
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                   용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
Sequence 232, Application US/10979159
Publication No. US20050142138A1
GENERAL INFORMATION:
APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelete
APPLICANT: Kenneth Kinzl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      148
                                                                                                                                                                                                                                                                                                                          148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                208
                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                          268
                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   293;
                                                                                                                                                                                                                                                                                                                                                                                                   88
                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                      LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA 180
                                                                                                                                                                                                                                                                                                                                                                                                                        RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NEKPPSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL 240
                                                                                                                                                                        NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA 180
                                                                                                                                                                                           NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG 293
                                                                                                                                                                                                                                                                     LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL 240
                                                                                                                                                                                                                                                                                                                                                                                                 RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/10979159
o. US20050142138A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1526; DB 5
Pred. No. 2e-147;
); Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ç,
                                                                                                                                                                        320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             267
                                                                                                                                                                                                                                                                                                                                                                                                   147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
GENERAL INFORMATION:

APPLICANT: Young, John A.T.

APPLICANT: Bradley, Kenneth A.

APPLICANT: Collier, Robert J.

APPLICANT: Collier, Robert J.

APPLICANT: Mogridge, Jeremy S.

TITLE OF INVENTION: Anthrax Toxin Receptor FILE REFERENCE: 960296.97745

CURRENT APPLICATION NUMBER: US/11/047,278

CURRENT APPLICATION NUMBER: US/09/970,076

PRIOR APPLICATION NUMBER: US/09/970,076

PRIOR FILING DATE: 2001-10-03

PRIOR APPLICATION NUMBER: 60/251,481

PRIOR PILING DATE: 2000-12-05

NUMBER OF SEQ ID NOS: 10

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 6

LENGTH: 564

TYPE: PRT

ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/979,159
CURRENT FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: US/09/918,715
PRIOR FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR PILING DATE: 2000-04-11
NUMBER OF SEG ID NOS: 358
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
US-11-047-278-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo sapiens US-10-979-159-232
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 6, Application US/11047278 Publication No. US20050196407A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.0%; Score 1526; DB 5; Best Local Similarity 100.0%; Pred. No. 2e-147; Matches 293; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS FILE REFERENCE: 1107.00134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 564
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181 LQGIIHSILKKSCIBILAABPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kenneth Kinzler
100.0%;
Score
Pred.
1526; DB 6;
No. 2e-147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
```

87 120 147 180

Ś 밁 Ś 밁 á 밁 Ś 밁 S

밁

240 207

```
US-09-833-245-620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: PF546PCT
CURRENT APPLICATION NUMBER: US/09/833,245
CURRENT FILING DATE: 2001-04-12
PRIOR APPLICATION NUMBER: 60/229, 358
PRIOR FILING DATE: 2000-04-12
PRIOR APPLICATION NUMBER: 60/256, 931
PRIOR APPLICATION NUMBER: 60/256, 931
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR FILING DATE: 2000-04-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 620
LENGTH: 403
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 620, Applic Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -09-833-245-620
                                                                                                                                                                                                                                                                                                     LOCATION: (175)
OTHER INFORMATION: X
NAME/KEY: SITE
LOCATION: (320)
OTHER INFORMATION: X
NAME/KEY: SITE
LOCATION: (331)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Human Genome Sciences, Inc. TITLE OF INVENTION: Albumin Fusion Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2000-04-25
NUMBER OF SEQ ID NOS: 2267
                                                                                                                                                                                                                                       OTHER INFORMATION: Xaa
                                                                                                                                                                                                                                                      NAME/KEY: SITE
LOCATION: (368)
                                                                                                                                                                                                                                                                                         OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: SITE
LOCATION: (175)
                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
 121
                                                                                                                                                           291;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13
                               88
                                                             61
                                                                                             28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 293;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                   QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA 180
                                                             RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                               RGTTLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIA
                                                                                               QGGRREDGGPACYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09833245 o. US20040010134A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                        Xaa
                                                                                                                                                                                                                                                                                         Xaa
                                                                                                                                                                                                                                                                                                                                                                                     Xaa
                                                                                                                                                                        99.3%;
99.7%;
                                                                                                                                                                                                                                         equals any of the naturally occurring L-amino
                                                                                                                                                                                                                                                                                        equals
                                                                                                                                                                                                                                                                                                                                        equals
                                                                                                                                                                                                                                                                                                                                                                                     equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>.</u>
                                                                                                                                                           <u>.</u>
                                                                                                                                                                          Score 1515; DB 3; Length 403; Pred. No. 1.7e-146;
                                                                                                                                                                                                                                                                                      any of
                                                                                                                                                                                                                                                                                                                                                                                   any of
                                                                                                                                                                                                                                                                                                                                      any of the naturally occurring
                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                        the naturally occurring L-amino
                                                                                                                                                                                                                                                                                                                                                                                     the naturally occurring L-amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,</u>
                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                      L-amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                           <u>.</u>.
                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                           acids
                                                                                                                                                                                                                                                                                         acide
                                                                                                                                                                                                                                                                                                                                        acids
                                                                                                                                                                                                                                                                                                                                                                                       acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                               87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     87
                               147
                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
US-09-796-753-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US
CURRENT FILING DATE: 2001-03
PRIOR APPLICATION NUMBER: 09
PRIOR FILING DATE: 1998-10-30
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR APPLICATION NUMBER: 09
PRIOR APPLICATION NUMBER: 09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 12, Application US/09796753 Publication No. US20030027998A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1998-12-30
PRIOR APPLICATION NUMBER: 09/224,246
PRIOR FILING DATE: 1998-12-30
PRIOR APPLICATION NUMBER: 09/259,388
PRIOR FILING DATE: 1999-02-26
PRIOR APPLICATION NUMBER: 60/122,458
                                                                                                                                                                           PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 1999-1 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 09/345,464
FILING DATE: 1999-06-30
APPLICATION NUMBER: 09/365,164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                            APPLICATION NUMBER: FILING DATE: 2000-
                                                                                                                                            APPLICATION NUMBER: FILING DATE: 2000-0
                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 2000-0
                                                                                                                                                                                                                                                          FILING DATE: 2000-0
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1999-1
                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1999-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
 APPLICATION
                              APPLICATION NUMBER:
                                                             APPLICATION NUMBER:
                                                                                                              FILING DATE:
                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 09/514,010
                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  148 LTDGELHEDLFFYSEREANRSRDLGAIXYCVGVKDFNETQLARIADSKDHVFFVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     McCarthy, Sean A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7853-227-999
                                                                                                                                                                                                                                                                                                                                                                                                      1999-09-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1999-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1999-03-01
                                                                                                            2000-07-3
                                                                                                                                                                           2000-06-19
                                                                                                                                                                                                                                         2000-03-01
                                                                                                                                                                                                                                                                       2000-02-25
                                                                                                                                                                                                                                                                                                                                        1999-12-29
                                                                                                                                                                                                                                                                                                                                                                      1999-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                                    1999-09-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1999-06-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1999-05-14
                                              2000-06-29
                                                                            2000-06-29
                                                                                                                                            2000-06-22
                                                                                                                                                                                                           2000-05-1
                                                                                                                                                                                                                                                                                                       1999-12-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1999-06-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-12-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-10-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SECRETED PROTEINS AND
                  2000-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001-03-01
                                                                                                                           09/630,334
                                                                                                                                                                                                                                                                                                                                                       09/474,071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09/223,546
                              09/665,666
                                                                                                                                                                                                                                                          09/516,745
                                                                                                                                                                                                                                                                                                                                                                                   09/471,179
                                                                                                                                                                                                                                                                                                                       09/474,072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09/336,536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09/312,359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09/183,175
                                                               09/606,317
                                                                                           09/606,565
                                                                                                                                                           09/599,596
                                                                                                                                                                                          09/597,993
                                                                                                                                                                                                                          09/572,002
                                                                                                                                                                                                                                                                                                                                                                                                                     09/409,634
                                                                                                                                                                                                                                                                                                                                                                                                                                                    09/399,723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09/342,687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09/223,094
 09/677,751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/09/796,753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THEREOF
```

Ś 밁 Ś 밁 Ş

```
; PRIOR FILING DATE: 2000-09-30; NUMBER OF SEQ ID NOS: 162; SEQ ID NO 12; LENGTH: 333; TYPE: PRT; ORGANISM: Homo sapiens US-09-796-753-12
                                                                       ち 음 ち
                                                                                                                                                                         र्
Search completed: December 14, 2005, 11:59:00 Job time : 89.4385 secs
                                          र्
                                                          밁
                                                                                                                        밁
                                                                                                                                        ঠ
                                                                                                                                                          밁
                                                                                                                                                                                         Query Match 99.2%; Score 1514; DB 3; Length 333; Best Local Similarity 100.0%; Pred. No. 1.6e-146; Matches 291; Conservative 0; Mismatches 0; Indels
                                                            0,
                                                                                                                                                                                          Gaps
                                                                                                                                                                                           0
```



```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Searched
           2222105
2322106
2323106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                        145.5
145.5
131
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
113.5
11
        104.5
104.5
104.5
104.5
103.5
103.5
99.5
95.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Published Applications AA New:*

1: /cgn2_6/prodata/1/pubpaa/US06_NEW_PUB.pep:*

2: /cgn2_6/prodata/1/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2_6/prodata/1/pubpaa/US07_NEW_PUB.pep:*

4: /cgn2_6/prodata/1/pubpaa/US07_NEW_PUB.pep:*

5: /cgn2_6/prodata/1/pubpaa/US10_NEW_PUB.pep:*

6: /cgn2_6/prodata/1/pubpaa/US11_NEW_PUB.pep:*

7: /cgn2_6/prodata/1/pubpaa/US11_NEW_PUB.pep:*

8: /cgn2_6/prodata/1/pubpaa/US11_NEW_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0
9.5
8.6
7.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_28_320
1526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     December 14, 2005, 11:18:48 ; Search time 4.30595 Seconds (without alignments)
458.218 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   51441 seqs, 6734002 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 QGGRREDGGPACYGGFDLYF.....DGLSFISSSVIITTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
        GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
        BB
  US-11-186-284-199
US-11-186-284-26
US-11-186-284-26
US-11-186-284-26
US-11-057-047-2
US-11-057-047-1
US-10-821-234-1034
US-10-131-826A-294
US-10-601-368-22
US-10-601-368-21
US-10-601-368-6
US-10-601-368-6
US-10-601-368-3
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
US-11-000-463-338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
sequence 199, App
sequence 2, Appli
sequence 2, Appli
sequence 1, Appli
sequence 1034, Ap
sequence 1034, Ap
sequence 294, App
sequence 294, Appl
sequence 24, Appl
sequence 27, Appl
sequence 6, Appli
sequence 6, Appli
sequence 6, Appli
sequence 3, Appli
sequence 3, Appli
sequence 983, App
sequence 983, App
sequence 983, App
sequence 981, App
sequence 981, App
sequence 981, App
sequence 981, App
sequence 25, Appli
sequence 27, Appli
sequence 27, Appli
sequence 1, Appli
sequence 1, Appli
sequence 1, Appli
sequence 1, Appli
sequence 1, Appli
sequence 1, Appli
sequence 1, Appli
sequence 1, Appli
sequence 1, Appli
sequence 1, Appli
sequence 271, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
```

ફ 유왕

121 LTDGELHEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQA 180

B 8	B 8	Que: Besi Mat	RESULT US-11- US-11- US-11- PAPP APP APP APP APP APP APP APP APP A		22222222222222222222222222222222222222
61 R 88 R	1 Q 28 Q	ry Match t Local Si ches 293;	1186-284- ence 199 ication 199		95 94 94 99 91.5 91.5 91.5 91.5 81 81 81 77.5 66 77.5 77.5 77.5 77.5 77.5 77.5 7
RGTTLMKLTEDREQIR           RGTTLMKLTEDREQIR	QGGRREDGGPACYGGF 	milarity Conserva	199 199 100 100 100 100 100 100 100 100		00000000000000000000000000000000000000
REQIR	CYGGE	100. 100. tive	ion US/1118 0266493A1 Pharmaceut lison te, Tracy L shubhangi Robert John E. Stephen N Awrence J. VEL GENES, FORTHERAPY OF -02992RNM JMBER: US/1 2005-07-21 BER: US/10/ 02-11-21 BER: US 60/ 03-05 BER: US 60/ 02-05-20 VEL GENES, FORTHERAPY OF -03992RNM MBER: US/1 005-07-21 005-07-21 005-05-20 02-03-05 02-03-05 02-03-05 02-03-05 02-03-05 02-03-05 02-03-05 02-03-05		00000000000000000000000000000000000000
<u> </u>	4710, 	0 %;	haceu accy accy hen hen bhen US/ US/ 10 12 1 13 6 10 10 10 10 10 10 10 10 10 10 10 10 10		000000000000000000000000000000000000000
0133   0133,		711 60	11186284 11186284 11 Eutical 12	של	US-1
ELOKALI       	TLDKSGS	red.	186284  L.  i  N. J. S. COMPOSI S. COMPOSI P COLON CA 21 0/301,822 0/301,822 0/361,978 0/361,988 0/381,988	ALIG	000000000000000000000000000000000000000
PGGD	SATH H H SATH	re 152 1. No. smatc	OSITION TIFICAT CANCER 771 771 88	IGNMENTS	337-1 37-1 37-1 37-1 37-1 37-1 37-1 37-1
DTYMHEGI	SVLHHWNEI	26; 6.8 ches	284  cals, Inc.  compositions, interview of the composition of the com	TS	\$-11-097-125-2 \$-11-137-465-45 \$-11-137-465-45 \$-11-137-465-45 \$-10-601-368-18 \$-10-613-786-2 \$-10-513-786-2 \$-10-513-786-10 \$-10-507-275-5 \$-10-793-626-10 \$-10-793-626-10 \$-10-763-712A-2 \$-10-763-712A-2 \$-10-763-712A-2 \$-10-763-712A-2 \$-10-763-712A-2 \$-10-763-712A-2 \$-10-763-712A-2 \$-10-10-467-65-10 \$-10-99-866-10 \$-10-99-866-3 \$-10-99-886-4 \$-10-99-886-4 \$-10-99-886-4 \$-10-99-886-4 \$-10-99-886-4
EGE HGE	X — X	DB e-1	(ON, K		3776 88 88 88 88 88 88 88 88 88 8
PERASI	FVEC	7; 35; 0;	KITS,		
	¥=¥	Length Indels	BSSM		
YYENROGY        YYENROGY	eiyyfveqlahkfise		SESSMENT		
YENROGYRTAS\           YENROGYRTAS\	SPQLRMS          SPQLRMS	564;			sequence s sequence sequence sequence sequence sequence sequence sequence s
RTAS	71 — 71	<del></del> ດ	EVE		
711	IVES	Зарв	PREVENTION		2, Appli 44, Appl 45, Appl 45, Appl 18, Appli 2, Appli 1, Appli 1, Appli 1040, Appli 5, Appli 5, Appli 1370, Appli 2, Appli 4370, Appli 2, Appli 3, Appli 14, Appli 14, Appli 170, Appli 2, Appli 3, Appli 3, Appli 3, Appli 3, Appli 3, Appli
A 12   A 14	T 60		•		Appli Appl Appl Appl Appli
7 0		0;	AND		

```
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 4
LENGTH: 1152
TYPE: PRT
ORGANISM: Homo sapiens
US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                              US-11-186-284-26
; Sequence 26, Application US/11186284
; Publication No. US20050266493A1
                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 2
US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4, Application US/11080026 Publication No. US20050260192A1
                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                            APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                          APPLICANT: Millennium Pharmaceuticals, APPLICANT: Berger, Allison APPLICANT: Guillemette, Tracy L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/11/080,026
CURRENT FILING DATE: 2005-03-15
PRIOR APPLICATION NUMBER: 09/945,265
PRIOR FILING DATE: 2001-08-31
PRIOR APPLICATION NUMBER: US 60/229,700
PRIOR FILING DATE: 2000-09-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: MODIFIED POLYPEPTIDES STABILIZED IN TITLE OF INVENTION: DESIRED CONFORMATION AND METHODS FOR REFERENCE: CFBF-P02-021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Springer, Timothy APPLICANT: Shimaoka, Motomu APPLICANT: Lu, Chafen
                                           APPLICANT:
CANT: Thibodeau, Stephen N.

CANT: Burgart, Lawrence J.

OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND

OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             148
                                                                                                                                                                                                                                                                                                                                                                                                    174
                                                                                                                                                                                                                                                                                                                                                           315
                                                                                                                                                                                                                                                                                                                                                                                                                                              258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 NEKPESVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200 FTFKEFONNPNPRSLVKPITOLL--GRTHTATGIRKVVRELFNITNGARKNAFKILVVIT 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           150 DIAFLIDGSGSIIPHDFRRMKEFVST-----VMEQLKKSKTLFS-----LMQYSEEFRIH 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 DLYFILDKSGSVL-HHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTED----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60,
                                                                             Berger, Allison
Guillemette, Tracy L.
Kamatkar, Shubhangi
Schlegel, Robert
Monahan, John E.
                                                                                                                                                                                                                                                                                                                                                                                                  VNDGFQALQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHA 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DGELHEDLFFYSE--REANRSRDLGAIVYCVGVKDFNETQLAR----IADS--KDHVFP 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LQGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DGEKFGDPLGYEDVIPEADRE----GVIRYVIGVGDAFRSEKSRQELNTIASKPPRDHVFQ 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NEKPFSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                           VNN-FEALKTIQNQLREK----IFAIEGTQTGSSSSFEHEMSQEGFSAA 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----REQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9.5%; Score 145.5; DB 7;
26.2%; Pred. No. 1.1e-05;
ative 45; Mismatches 81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1152;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FOR A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRODUCING SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               207
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR FILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-11-186-284-26
                                                                                                           US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version SEQ ID NO 26 LENGTH: 3063
Query Match 7.4%; Score 113.5; DB 7; Best Local Similarity 19.6%; Pred. No. 0.0058; Matches 66; Conservative 63; Mismatches 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 8.6%; Score 131; DB 7; Best Local Similarity 29.8%; Pred. No. 0.00096; Matches 59; Conservative 38; Mismatches 75
                                                                                                                                                                                                          SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2, Application US/11057047 Publication No. US20050260198A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Holers, Vernon
APPLICANT: Thurman, Joshua
APPLICANT: Taube, Christian
APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The Alternative Complement Pathway
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR APPLICATION NUMBER: US04/015040
PRIOR APPLICATION NUMBER: US04/015040
                                                                                                                                                                                                                               PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn version 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: THERAPY OF COLON CANCER FILE REFERENCE: MPM01-029P2RNM
                                                                                                                           LENGTH: 739
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        609 SFELTOSICLRIEQELAA 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          185 IHSILKKSCIEI---LAA 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         127 HEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIAD--SKDHVFPVNDGFQALQGI 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                500 VEDII----EAINTFPYRGGSTNTGKAMTYVREKIFVPSK-GSRSNVPKVMILITDGK-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 440 DIVFLVDGSYSIGIANFVKVRAFLEVLVKSFEISPNRVQISLVQYSRDPHTEFTLKKFTK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFST---RGTTLMKLTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            71 DREQIRQGLEELQKVLP--GGDTYMHEGFERASEQIYYENRQGYRT--ASVIIALTDGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SSDAF---RDPAIKLRNSDVEIFAVGVKDAVRSELEAIASPPAETHVFTVED-FDAFQRI
                                                                                                                                                                                                                                    version 3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 7; Length 3063;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
       Indels
                                                    Length 739;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26;
       99;
       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13
       17;
```

```
δ
                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 5
US-11-057-047-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                ş
                                                   밁
                                                                                  ঠ
                                                                                                                      밁
                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo sapiens
US-11-057-047-1
                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR FILING DATE: 2004-02-10
PRIOR FILING DATE: 2004-05-13
PRIOR APPLICATION NUMBER: US/11/05/04/015/04
PRIOR FILING DATE: 2004-05-13
PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                               SOPTWARE: PatentIn version 3.3 SEQ ID NO 1
                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/11057047 Publication No. US20050260198A1
                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Holers, Vernon
APPLICANT: Thurman, Josh
APPLICANT: Taube, Christ
                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 70
TYPE: PRT
                                                                                                                                                                                                                                                                           y Match 7.4%; Score 113.5; DB Local Similarity 19.6%; Pred. No. 0.0061;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             390
                   136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     278
                                                   356
                                                                                                                      303 YGVKP--RYGLVTYATYPKIWVKVSEADSSNADWVTKQLNEINYEDHKLKSGTNT---- 355
                                                                                                                                                                                          243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97
                                                                                                                                                        45
                                                                                                                                                                                                                                                          66;
                                                                                                                                                                                                                        1 QGGRREDG-GPA------CYGGFDLYFILDKSGSV-----LHHWNEIYYFVEQLAH 44
                                                                                                                                                  KFISPQLRMSFIVFSTRGTTLMKLTE----DREQIRQGLEEL----QKVLPGGDTYMHEG 96
REANRSRDLGAIVYCVG--VKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 193
                                                  -KKALQAVYSMMSWPDDVPPEGWNRTRHVIILMTDGLHNMGGDPITVIDBIRDLLYIGKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REANRSRDLGAIVYCVG--VKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YGVKP--RYGLVTYATYPKIWVKVSEADSSNADWVTKQLNEINYEDHKLKSGTNT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KFISPQLRMSFIVFSTRGTTLMKLTE----DREQIRQGLEEL----QKVLPGGDTYMHEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EGVDAEDGHGPGEQQKRKIVLDPSGSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKVAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QGGRREDG-GPA------CYGGFDLYFILDKSGSV-----LHHWNEIYYFVEQLAH
                                                                                                                                                                                      EGVDAEDGHGPGEQQKRKIVLDPSGSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKVAS 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----IRPSKGHESCMG-----AVVSEYFVLTAAHC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----QSLSLC-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLL 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RKNPREDYLDVYVFGVGPLVNQVNINALASKKDNEQHVFKVKD-MENLEDVFYQMIDES-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -KKALQAVYSMMSWPDDVPPEGWNRTRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FERASEQIYYENR-----QGY-RTASVIIALTDG-----ELHEDLFFYSE 135
                                                                                    FERASEQIYYENR-----QGY-RTASVIIALTDG-------ELHEDLFFYSE 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Thurman, Joshua
Taube, Christian
                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                          63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -GMVWEHRKGTD----
                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The Alternative Complement Pathway
                                                                                                                                                                                                                                                                                         DB 7;
                                                                                                                                                                                                                                                          109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        290
                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---YHKQPWQAKISV---
                                                                                                                                                                                                                                                                                              764;
                                                                                                                                                                                                                                                          99;
                                                                                                                                                                                                                                                          Gaps
                                                     414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 389
                                                                                                                                  RESULT 7
US-10-131-826A-294
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                               멼
                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                          닭
                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maure,
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Elle
                                                                                                    Sequence 294, Application US/10131826A Publication No. US20050245730A1
                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                              507
                                                                                                                                                                                                                                                                                                                                                449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         415
                                                                                                                                                                                                                                                                                                                                                                                                                                                       97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         45
                                                                                                                                                                                                                                                                              -----QSLSLC----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RKNPREDYLDVYVFGVGPLVNQVNINALASKKDNEQHVFKVKD-MENLEDVFYQMIDES-
                                Beresini, Maureen
DeForge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       --QSLSLC
```

```
FILE REFERENCE: 821A
CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR FILING DATE: 2003-04-07
PRIOR FILING DATE: 2003-04-07
NUMBER OF SEQ ID NOS: 1704
SOPTWARE: pt SEQ_genes Version 1.0
SEQ ID NO 1034
LENGTH: 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1034, Application US/10821234 Publication No. US20050255114A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Labat, Ivan
APPLICANT: Stache-Crain, Birgit
APPLICANT: Andarmani, Susan
APPLICANT: Tang, Y. Tom
APPLICANT: Tang, Y. Tom
APPLICANT: Tang, Y. Tom
                                                                                                                                                                194 IEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLL
                                                                                                                                                                                                                                                                          136 REANRSRDIGATVYCVG--VKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                    390 -KKALQAVYSMMSWPDDVPPEGWNRTRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKD
                                                                                                                                                                                                                                                                                                                                                                                                                                              337 YGVKP--RYGLVTYATYPKIWVKVSEADSSNADWVTKQLNEINYEDHKLKSGTNT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     502 ---- IRPSKGHESCMG-----AVVSEYFVLTAAHC 527
                                                   254 CPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHC 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 QGGRREDG-GPA------CYGGFDLYFILDKSGSV-----LHHWNEIYYFVEQLAH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               h 7.4%; Score 113.5; DB 6; Similarity 19.6%; Pred. No. 0.0064; 66; Conservative 63; Mismatches 109;
                                                                                                                                                                                                                                                                                                                                                                               FERASEQIYYENR------QGY-RTASVIIALTDG------ELHEDLFFYSE 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KFISPQLRMSFIVFSTRGTTLMKLTE----DREQIRQGLEEL----QKVLPGGDTYMHEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EGVDAEDGHGPGEQQKRKIVLDPSGSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKVAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKPFSVEDTYLL
                                                                                                                                                                                                                       RKNPREDYLDVYVFGVGPLVNQVNINALASKKDNEQHVFKVKD-MENLEDVFYQMIDES-
IRPSKGHESCMG-----AVVSEYFVLTAAHC
                                                                                                             GMVWEHRKGTD-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GMVWEHRKGTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 798;
                                                                                                             ---YHKQPWQAKISV---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -YHKQPWQAKISV--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                193
                                                                                                                                                                                                                                                                                                                                       448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         253
                                                                                                                                                                   253
                                                                                                                                                                                                                                                                                                                                                                                                                                                 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     501
                                                                                                                                                                                                                          506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17
```

```
RESULT 8
US-11-113-424-39
                                                                                                                                   Ś
                                                                                                                                                                            밁
                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    б
                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; ORGANISM: Homo Sapien
US-10-131-826A-294
Sequence 39, Application US/11113424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 294
LENGTH: 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/131,826A CURRENT FILING DATE: 2002-04-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3330R1C128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
les 55; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059263
FILING DATE: 1997-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/059122
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059115
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059117
FILING DATE: 1997-09-17
FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/059588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/059352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1997-09-19
                                                                                                                                                                              226
                                                                                                                                                                                                                   182
                                                                                                                                                                                                                                                           171
                                                                                                                                                                                                                                                                                              124
                                                                                                                                     237 SVTLNE 242
                                                                                                 282 LCAMED 287
                                                                                                                                                                                                                                                                                                                                                                           69
                                                                                                                                                                                                                                                                                                                                                                                                                 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                        17
                                                                                                                                                                                                                   QGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHAR-----NVDRVLCSFKIND 236
                                                                                                                                                                                                                                                         GRPQDSV----AEVAAKARDTGILIFAIGVGQVDFNTLKSIGSEPHEDHVFLVAN-FSQI
                                                                                                                                                                                                                                                                                                                                                                           TEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYR----TASVIIALTD 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                      DLYFILDKSGSV-LHHWNEIYYF-VEQLAHKFISPQL-RMSFIVFSTRGTTL-----MKL
                                                                                                                                                                            ETLTSVFQKKLCTAHMCSTLEHNCA--HFCINIPGSYVCRCKQGYILNSDQTTC--RIQD
                                                                                                                                                                                                                                                                                              GELHEDLFFYSEREANRSRDLGAIVYCVGV--KDFNETQLARIADSKDHVFPVNDGFQAL 181
                                                                                                                                                                                                                                                                                                                                    FKRKSEVERAVKRMRHLSTGTMTGLAIQY---ALNIAFSEAEGARPLRENVPRVIMIVTD
                                                                                                                                                                                                                                                                                                                                                                                                                 DLVFIIDSSRSVNTHDYAKVKEFIVDILQFLDIGPDVTRVGLLQY---GSTVKNEFSLKT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gurney, Austin L. Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Watanabe, Colin K Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stewart, Timothy A. Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Goddard, Audrey
Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7.4%;
ilarity 22.4%;
Conservative 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zemin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Score 113.5; DB 6;
; Pred. No. 0.0078;
53; Mismatches 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 915;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                           225
                                                                                                                                                                                                                                                                                                                                      170
                                                                                                                                                                                                                                                                                                                                                                                                                 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                        83
                                                                                                                                                                                281
```

```
; ORGANISM: Homo sapiens
US-11-113-424-39
                                                                                                                                                                                                                                                                                               RESULT 9
US-10-601-368-24
                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/256,704
PRIOR FILLING DATE: 2000-12-19
PRIOR APPLICATION NUMBER: 60/311,590
PRIOR FILLING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: 60/257,314
PRIOR FILLING DATE: 2000-12-20
PRIOR PELICATION NUMBER: 60/311,613
PRIOR APPLICATION NUMBER: 60/315,617
PRIOR APPLICATION NUMBER: 60/315,617
                                                                                                                                                                                                                          Sequence 24, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Publication No. US20050260713A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Gangolli et al.
TITLE OF INVENTION: Polypeptides and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 2001-05-29
PRIOR APPLICATION NUMBER: 60/288,153
PRIOR FILING DATE: 2001-05-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/11/113,424
CURRENT FILING DATE: 2005-04-21
                PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
                                                                                   CURRENT APPLICATION NUMBER: US/10/601,368
                                                                                                                                  APPLICANT: Pan, Yang
APPLICANT: LOYA, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT
FILE REFERENCE: 07334-275001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 2001-05-02
NUMBER OF SEQ ID NOS: 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 2001-08-29
APPLICATION NUMBER: 60/307,506
FILING DATE: 2001-07-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/322,358 FILING DATE: 2001-09-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/294,075
FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            171
                                                                                                                                                                                                                                                                                                                                                                                            282 LCAMED
                                                                                                                                                                                                                                                                                                                                                                                                                                    237 SVTLNE 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               182 QGIIHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHAR-----NVDRVLCSFKIND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       124 GELHEDLFFYSEREANRSRDLGAIVYCVGV--KDFNETQLARIADSKDHVFPVNDGFQAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      114 FKRKSEVERAVKRMRHLSTGTMTGLAIQY---ALNIAFSEAEGARPLRENVPRVIMIVTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               69 TEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYR-----TASVIIALTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57 DLVFIIDSSRSVNTHDYAKVKEFIVDILQFLDIGPDVTRVGLLQY---GSTVKNEFSLKT 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17 DLYFILDKSGSV-LHHWNEIYYF-VEQLAHKFISPQL-RMSFIVFSTRGTTL-----MKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GRPQDSV----AEVAAKARDTGILIFAIGVGQVDFNTLKSIGSEPHEDHVFLVAN-FSQI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ETLTSVFQKKLCTAHMCSTLEHNCA--HFCINIPGSYVCRCKQGYILNSDQTTC--RIQD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7.4%;
ilarity 22.4%;
Conservative 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 113.5; DB 
Pred. No. 0.0083; 
33; Mismatches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         103;
                                                                                                                                                               AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                               THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      956;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
```

13;

236

225

```
밁
                                                                                                                                                                                   S
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: PRT ; ORGANISM: Mus musculus US-10-601-368-24
 문
                               ঠ
                                                                           밁
                                                                                                        ş
                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 10
US-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 40
SOFTWARE: FRANCSEQ for Windows Version 3.0
SEQ ID NO 22
LENGTH: 1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for WiseQ ID NO 24
LENGTH: 1141
                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 22, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Mus musculus
-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REPERRNCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR ILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Pan, Yang APPLICANT: Lora, Joi
                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
                                                                                                                                                                                                                                                                                                    / Match 7.3%; Score 111; DB 6
Local Similarity 24.1%; Pred. No. 0.019;
nes 49; Conservative 28; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                   161
313
                                                                                                                127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             159
                                                                           253
                                                                                                                                                  195 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES
                                                                                                                                                                                                                             137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           335 EAAL---KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 217 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49;
                                                                                                                                                                                         70
                                                                                                                                                                                                                                                                  12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12 CYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                           CQTYMDIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HDSPDLEKVIRQSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD 334
EAAL---KDIVDALGDRIFSLEG 332
                                   LARIADSKDHVFPVNDGFQALQG 183
                                                                                                                                                                                     EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 126
                                                                                                                                                                                                                                                              CYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LARIADSKDHVFFVNDGFQALQG 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COTYMDIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGFGQIQVGIVQYGEDAVHEFHL-
                                                                       HDSPDLEKVIRQSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD
                                                                                                            HED-----FNETQ 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HED-----FACTQ 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7.3%; Score 111; DB 6; Length 1141; 24.1%; Pred. No. 0.018;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28; Mismatches
                                                                                                                                                                                                                                                                                                                                         DB 6; Length 1166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88;
                                                                                                                                                                                                                                                                                                        88
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AND USES THEREOF
                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                        38;
                                                                           312
                                                                                                                                                  252
                                                                                                                                                                                                                             194
                                                                                                                                                                                                                                                                                                      ø
```

```
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR FILING DATE: 2004-12-14
PRIOR APPLICATION NUMBER: US04/015040
PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin version 3.3
SEQ ID NO 6
LENGTH: 761
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-11-057-047-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 6, Application US/11057047
Publication No. US20050260198A1
                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 21
LENGTH: 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21, App
Publication No.
                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: LOTA, JOSE M.

TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF FILE REFERENCE: 07334-275001

CURRENT APPLICATION NUMBER: US/10/601,368

CURRENT FILING DATE: 2003-06-23

PRIOR APPLICATION NUMBER: US/09/561,263A

PRIOR FILING DATE: 2000-04-27

PRIOR FILING DATE: 2000-04-27

PRIOR FILING DATE: 1999-05-28

NUMBER OF SEO ID NOS: 40
                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
                                                                                                                                                                                                                                                                    APPLICANT: Gelfand, Erwin
APPLICANT: Gelkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, '
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Holers, Vernor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    V Match 7.3%;
Local Similarity 24.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 217 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 49; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161 LARIADSKDHVFPVNDGFQALQG 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         70 EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12 CYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HDSPDLEKVIRQSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CQTYMDIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EAAL---KDIVDALGDRIFSLEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (1) ... (22)
                                                                                                                                                                                                                                                                                                                                                                        Thurman, Joshua
Taube, Christian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/10601368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Score 111; DB 6; Pred. No. 0.019; 28; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQ 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 6;
                                                                                                                                                                                                                                                                                                               The
                                                                                                                                                                                                                                                                                                                 Alternative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                               Complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                 Pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    216
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Mus musculus US-11-057-047-6
  맑
                                   S
                                                                            밁
                                                                                                                  á
                                                                                                                                                           밁
                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Homo sapiens FEATURE: ; NAME/KEY: SIGNAL ; LOCATION: (1)...(22) US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 6, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 20.5
Matches 71; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 6
LENCTH: 1141
TYPE: PRT
                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: LOZB, JÖBE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT /
FILE REFERENCE: 0734-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR PILING DATE: 2000-04-27
PRIOR PILING DATE: 2000-04-27
PRIOR PILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Pan, Yang APPLICANT: Lora, Jos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                      v Match 7.0%; Score 107; DB 6; Length 1141;
Local Similarity 24.1%; Pred. No. 0.043;
1es 49; Conservative 28; Mismatches 88; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         350 TNT-----KRALQAVYSMMSWAGDAPPEGWNRTRHVIIIMTDG-LHNMGGNPVTVIQDI 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        293 -LIEKVASYGVRP--RYGLLTYATVPKVLVRVSDERSSDADWVTEKLNQISYEDHKLKSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240 EGADAEDGHSPGEQQKRKIVLDPS--GSMNIYLVLDGSDSIGSSNFTGAKRCLTN----
                                                                                                                                                             159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   502 LKGHET---CMGAV-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          245 FSVEDTYLLCPAPILKEVGMKAALQVSMNDGLSFISSSVIITTTHC 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       185 IHSILKKSCIEILAAEPSTICAGESFQVVVRGNGFRHARNVDRVLCSFKINDSVTLNEKP 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               403 RALLDIGRDPKNPREDYLDVYVFGVGPLVDSVNINALASKKDNEHHVFKVKD-MEDLENV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  131 FFYSE--REANRSRD--LGAIVYCVG--VKDFNETQLARIADSKDHVFPVNDGFQALQGI 184
  275
                                                                              217 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGES 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   89 GDTYMHEGFERASEQIYY-----ENRQGY-RTASVIIALTDGELH------EDL 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                37 YFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDR-----EQIRQGLEELQKVLPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 QGGRREDG------GPACYGGFDLYFILDKSGSV-----LHHWNEIY 36
                                                                                                                                                       COTYMDIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGVVQYGEDVVHEFHL-
                                                                                                                                                                                CYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FYQMIDET -
HDSPDLEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD
                                                                                                                  EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7.2%; Score 110.5; DB 7; 20.5%; Pred. No. 0.011;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----KSLSLC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    59; Mismatches
                                       ----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQ 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----VSEYFVLTAAHC 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GMVWEHKKGNDYHKQPWQAKISVT---RP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels 117; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                            Indels 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          761;
                                                                                                                                                                                                                                          Gaps
    334
                                                                                                                                                                216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
```

```
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR APPLICATION NUMBER: US/09/322,790
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 3
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 14
US-10-601-368-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-601-368-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-601-368-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; SEQ ID NO 4
; LENGTH: 1166
; TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 4, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 49; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Pan, Yang
APPLICANT: LOTA, JOSE M.
APPLICANT: LOTA, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR PILING DATE: 2000-04-27
PRIOR PILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version 3.0
                            TYPE: PRT ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens
NAME/KEY: SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                137 CQTYMDIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGVVQYGEDVVHEFHL- 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                335 EAAL---KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  161 LARIADSKOHVFFVNDGFQALQG 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               313 EAAL---KDIVDALGDRIFSLEG 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161 LARIADSKOHVFPVNDGFQALQG 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    253 HDSPDLEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           195 NDYRSVKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMÍVITDGES 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12 CYGGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISF-QLRMSFIVFSTRGTTLMKLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    70 EDREQIRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGEL 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HED-----FNETQ 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7.0%; Score 107; DB 6; Length 1166; ilarity 24.1%; Pred. No. 0.044; Conservative 28; Mismatches 88; Indels 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          312
```

THIS PAGE BLANK (USPTO)

```
Command line parameters:

-MODEL-frame+ p2n.model -DEV=xlh
-Q=/Cgn2 1/USFTO_spool/US09970076/runat 14122005 111850 20999/app_query.fasta_1.2410
-DB=Issued Patents NA -QFMT=fastap -SUFFIX=rni -MINWATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=5its -START=1 -END=-1 -WATRIX=blosum62 -TRANS-human40.cdi
-LOOPEXT=0 -UNITS=5its -START=1 -END=-1 -WATRIX=blosum62 -TRANS-human40.cdi
-LIST=45 -DOCALIGN-200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US09970076 @GCN 1 1 535 @runat 14122005 111850 2099 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQÜERY -NEG-SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                   Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Minimum DB seq length: Maximum DB seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                  score greater than and is derived by *
                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                 Issued_Patents NA:*

1: /cgn2_6/ptodata/)

2: /cgn2_6/ptodata/)

3: /cgn2_6/ptodata/)

4: /cgn2_6/ptodata/)

5: /cgn2_6/ptodata/)

5: /cgn2_6/ptodata/)

6: /cgn2_6/ptodata/)

9: /cgn2_6/ptodata/)

9: /cgn2_6/ptodata/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                is the number of results predicted by chance to have a ster than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          December 18, 2005, 07:01:37; Search time 205.707 Seconds (without alignments) 2531.884 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_28_320
1526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1303057 segs, 888780828 residues
        51.5
46.5
46.5
10.9
10.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QGGRREDGGPACYGGFDLYF.....
                                                                                                                                                                                                                                                                                                             /cgn2_6/ptodata/1/ina/1_COMB.seq:*
/cgn2_6/ptodata/1/ina/5_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/H_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/RE_COMB.seq:*
/cgn2_6/ptodata/1/ina/RE_COMB.seq:*
/cgn2_6/ptodata/1/ina/RE_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000000000
      1609
2234
1492
1492
3519
3519
3519
3519
                                                                                                                                                                      B
   US-09-620-312D-8
US-10-104-047-659
US-09-774-528-297
US-10-120-988-297
US-09-799-451-250
US-08-286-889-45
US-08-485-618-45
US-08-362-652-45
US-08-605-672-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 summaries
                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DGLSFISSSVIITTTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2606114
Sequence 8, Appli
Sequence 669, App
Sequence 297, App
Sequence 297, App
Sequence 250, App
Sequence 45, Appl
Sequence 45, Appl
Sequence 45, Appl
Sequence 45, Appl
                                                                                                                                                                  Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1
US-09-620-312D-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 8,
Patent No.
GENERAL INF
                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Tang, 1
APPLICANT: Liu, (
APPLICANT: Asund:
APPLICANT: Zhang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
159.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION:
```

```
166 10.9 3519 2 US-08-482-293A-45 Sequence 45, Appl 166 10.9 3519 3 US-09-193-043-45 Sequence 45, Appl 166 10.9 3519 3 US-09-193-043-45 Sequence 45, Appl 166 10.9 3519 3 US-09-350-259-45 Sequence 25, Appl 166 10.9 3803 2 US-08-485-618-52 Sequence 52, Appl 166 10.9 3803 2 US-08-605-672-52 Sequence 52, Appl 166 10.9 3803 2 US-08-943-363-52 Sequence 52, Appl 166 10.9 3803 2 US-08-943-363-52 Sequence 52, Appl 166 10.9 3803 3 US-09-688-307A-55 Sequence 52, Appl 166 10.9 3803 3 US-09-688-307A-52 Sequence 52, Appl 159.5 10.5 3528 2 US-08-943-363-52 Sequence 52, Appl 159.5 10.5 3528 2 US-08-362-652-36 Sequence 36, Appl 159.5 10.5 3528 2 US-08-362-652-36 Sequence 36, Appl 159.5 10.5 3528 2 US-08-362-652-36 Sequence 36, Appl 159.5 10.5 3528 2 US-08-362-652-36 Sequence 36, Appl 159.5 10.5 3528 2 US-08-362-652-36 Sequence 36, Appl 159.5 10.5 3528 3 US-09-688-307A-36 Sequence 36, Appl 159.5 10.5 3528 3 US-09-688-307A-36 Sequence 36, Appl 159.5 10.5 3528 3 US-09-688-307A-36 Sequence 36, Appl 159.5 10.5 3527 2 US-08-362-652-36 Sequence 36, Appl 159.5 10.5 3597 2 US-08-482-293A-36 Sequence 54, Appl 159.5 10.5 3597 2 US-08-482-293A-54 Sequence 54, Appl 159.5 10.5 3597 3 US-09-688-307A-54 Sequence 54, Appl 159.5 10.5 3597 3 US-09-688-
```

## ALIGNMENTS

```
US-09-620-312D-8

J Sequence 8, Application US/09620312D

Pacent No. 6569662

GENERAL INFORMATION:
APPLICANT: Tang, Y. Tom
APPLICANT: Tang, Y. Tom
APPLICANT: Asundi, Vinod
APPLICANT: Asundi, Vinod
APPLICANT: Asundi, Vinod
APPLICANT: Chen, Rui-hong
APPLICANT: Chen, Rui-hong
APPLICANT: Yang, Yonghong
APPLICANT: Warn, Tom
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Johnrui
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Zhiwei
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6569662el Nucleic Acids
TITLE OF INVENTION: No. 6569662el Nucleic Acids
TITLE OF INVENTION: No. 6569662el Nucleic Acids
TITLE OF INVENTION: No. 6569662el Nucleic Acids
TITLE OF INVENTION: No. 6569662el Nucleic Acids
TITLE OF INVENTION NUMBER: US/09/620,312D
CURRENT APPLICATION NUMBER: US/09/620,312D
PRIOR APPLICATION NUMBER: 09/488,725
PRIOR APPLICATION NUMBER: 09/488,725
PRIOR TILING DATE: 2000-01-21
PRIOR TILING DATE: 2000-01-21
NUMBER OF SEQ ID NOS: 1105
SOFTWARE: pt_FL_genes Version 1.0
```

SEQ ID LENGTH:

ð

```
TYPE: DNA
GRGANISM: Homo sapi
FEATURE:
NAME/KEY: CDS
LOCATION: (309)...(1)
US-09-620-312D-8
RESULT 2
US-10-104-047-669
                                                                               밁
                                                                                                                         밁
                                                                                                                                                 δ
                                                                                                                                                                            밁
                                                                                                                                                                                             S
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2_COPY_28_320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similari
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores: Pred. No.:
                                   밁
                                                       δ
                                                                                                 δ
                                   1110
                                                                                 1050
                                                          241
                                                                                                                                                                              930
                                                                                                                                                                                                                             870
                                                                                                                                                                                                                                                  161
                                                                                                                                                                                                                                                                           810
                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                         750
                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                        690
                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                      630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               390
                                                                                                        221
                                                                                                                              990
                                                                                                                                                                                                     181
                                                                                                                                                     201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                          AshGlu 242
                                                                                                                                                                                                                                         LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                         SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                        LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                                                                     SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVallleIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                  GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAGGGGGACGCAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                 CATGECCGCAACGTGGA
                                                                                            HisAlaArgAsgArgValLeuCysSerPheLysIleAsgAsgSerValThrLeu
                                                                                                                                                                                             LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu
                                                                                                                                                                                                                            CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                      CGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgGlyThrThrLeuMetLy8LeuThrGluAspArgGluGlnIleArgGlnGlyLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACC
                                   AGTIMAG
                                                                                                                               CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                              ProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArg
                                                                                                                                                                              CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                           TCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (1202)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.03e-153
1257-00
100.00%
99.17%
82.37%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           x US-09-620-312D-8 (1-1609)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1609
240
                                                                                   1109
                                                                                                                                1049
                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                  160
                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40
                                                                                                         240
                                                                                                                                                                              989
                                                                                                                                                                                                      200
                                                                                                                                                                                                                             929
                                                                                                                                                                                                                                                                            869
                                                                                                                                                                                                                                                                                                                          809
                                                                                                                                                                                                                                                                                                                                                                        749
                                                                                                                                                                                                                                                                                                                                                                                                                       689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                449
```

```
Sequence 669, Application US/10104047

Patent No. 6943241

GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
FILE OF INVENTION: No. 6943241e1 full length cD)
FILE REFERENCE: H1-A0105

CURRENT APPLICATION UNMBER: US/10/104,047

CURRENT FILING DATE: 2002-03-25

PRIOR APPLICATION NUMBER:
PRIOR FILING DATE:

NUMBER OF SEQ ID NOS: 4096
SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 669
LENGTH: 2234
TYPE: DNA
RORANISM: Homo sapiens
                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                         밁
                                            S
                                                                                                8
                                                                                                                                                   Ş
                                                                                                                                                                                 문
                                                                                                                                                                                                       S
                                                                                                                                                                                                                                  뭥
                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_28_320 (1-293) x US-10-104-047-669 (1-2234)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Ş
                                                                           밁
                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-104-047-669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                            877
                                                                                                                                                                                                                                                                                                                                                                                                                                               991 GTGCCATCATATGCAGAGAAAGAGGCAAAGATATCCAGGTCACTTGGGGCTAGTGTTTAT
                                                                                                                                                                                                                                                                130
                                                                                                                                                                                                                                                                                                                                                                                               817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       637
                                                                                                                                                                                                                                                                                                                                                                                             90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10 ProAlaCysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ||||:::|||
CCTTCCTGCAGAAGAGCCTTTGATCTCTACTTCGTCCTGGACAAGTCTGGGAGTGTGGCA
 CysSerPheLysIleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAsp
                         GCTCAGTCATGTACTGAAATCCTAGAATTGCAGCCCTCAAGTGTCTGTGTGGGGGAA
                                                                                            LysLysSerCysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSer
                                                                                                                                HisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu
                                                                                                                                                                                   TGTGTTGGTGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAG
                                                                                                                                                                                                    CysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAsp
                                                                                                                                                                                                                                                 LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                          GGAGGCTTGAAAACCTCCAGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTG
                                                                                                                                                                                                                                                                                                       GlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp
                                                                                                                                                                                                                                                                                                                                            GAGACATATATCCATGAAGGACTAAAGCTAGCGAATGAACAAATT-----CAGAAAGCA
                                                                                                                                                                                                                                                                                                                                                        AspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg :::||||||:::|||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.61e-91
786.00
72.89%
53.87%
51.51%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA
                                                                                1230
                                                                                                         209
  249
                             1290
                                                                                                                                                            189
                                                                                                                                                                                     1110
                                                                                                                                                                                                               169
                                                                                                                                                                                                                                       1050
                                                                                                                                                                                                                                                                149
                                                                                                                                                                                                                                                                                           990
                                                                                                                                                                                                                                                                                                                                             930
                                                                                                                                                                                                                                                                                                                                                                       109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29
                                                                                                                                                                                                                                                                                                                     129
                                                                                                                                                                                                                                                                                                                                                                                                 876
                                                                                                                                                                                                                                                                                                                                                                                                                        89
                                                                                                                                                                                                                                                                                                                                                                                                                                                   816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    756
```

```
TYPE: DNA
GRGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (79)..(1434)
US-09-774-528-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Wang, Juan-Rui
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6743619el Nucleic Aci
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 802
CURRENT APPLICATION NUMBER: US/09/774,528
CURRENT FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
SOFTWARE: pt_FL_genes Version 2.0
SEQ ID NO 297
LENGTH: 1492
                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                             밁
                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-774-528-297
δ
                             밁
                                                           र्
                                                                                              밁
                                                                                                                       र्
                                                                                                                                                                                                                          US-09-970-076-2_COPY_28_320 (1-293) x US-09-774-528-297 (1-1492)
                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 297, Application US/09774528 Patent No. 6743619
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               270
                                136 GGAGACAGAGGCAAAATCAGTAAAGGCTTGGAGGATTTAAAACGTGTTAGTCCAGTAGGA 195
 90
                                                                70
                                                                                                                      50 GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr 69
                                                                                                                                                               16
                                                                                                                                                                              HisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerPro 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCA 1410
                                                                                               GAAATGAGATTATCTTTCATTGTGTTTTCTTCTCAAGCAACTATTATTTTGCCATTAACT 135
                                                                                                                                                               ANTANCTGGATTGAAATTTATAATTTCGTACAGCAACTTGCGGAGAGATTTGTGAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysSerAspGly 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ren, Feiyan
Zhang, Jie
Zhao, Qing A.
Yang, Yonghong
Xue, Aidong J.
Wehrman, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTTCTAACGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrTyrLeuLeuCysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGln 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg 105
                                                     GluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGly 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Goodrich, Ryle
Liu, Chenghua
Asundi, Vinod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zhou, Ping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
Tom
                                                                                                                                                                                                                                                                            8.77e-82
709.00
72.35%
52.65%
46.46%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1482
                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and
                                                                                                                                                                                                                                                             1492
139
52
71
2
                                                                                                                                                                75
                              ; IENGTH: 1492
; TYPE: DNA
; ORGANISM: Homo sapiens
; EATURE:
; NAMES/KEY: CDS
; LOCATION: (79)..(1434)
US-10-120-988-297
                                                                                                                              GENERAL INFORMATION:
APPLICANT: Tang, Y. Tom
APPLICANT: Goodrich, Ryle
APPLICANT: Liu, Chenghua
APPLICANT: Ren, Feiyan
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
FILE OF INVENTION: No. 691919el Nucleic Acids and
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 802CON
CURRENT APPLICATION NUMBER: US/10/120,988
CURRENT APPLICATION NUMBER: 09/774,528
FRIOR APPLICATION NUMBER: 09/774,528
PRIOR APPLICATION NUMBER: 09/774,528
PRIOR FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 441
SOFTWARE: pt FL_genes Version 2.0
TERCITH: 1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-120-988-297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 297, Application US/10120988 Patent No. 6919193 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130 LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                250 GGAGGCTTGAAAACCTCCAGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTG 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               196 GAGACATATATCCATGAAGGACTAAAGCTAGCGAATGAACAAATT-----CAGAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CysSerAspGly
|||||:::||
| TGTTCTAACGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrTyrLeuLeuCysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGln :::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCACTTACACTGTAAATGAAACATATACAACGAGTGTAAAACCAGTAAGTGTACAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysSerPheLysIleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PheGlnValValValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTCAGTCATGTACTGAAATCCTAGAATTGCAGCCCTCAAGTGTCTGTGTGGGGGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysLysSerCysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSer 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGCCATCATATGCAGAGAAAGAGGCAAAGATATCCAGGTCACTTGGGGCTAGTGTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTCAGATTGTCTTAAGTGGAAGAGGATTCATGCTGGGCAGTCGGAATGGCAGTGTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGTTGGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 801
```

669 249 609 229 189

429

489

549

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                           RESULT 5
US-09-199-451-250
; Sequence 250, Application
; Patent No. 6783969
; GENERAL INFORMATION:
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                           음 성
                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                               밁
APPLICANT: Tang, Y. Tom
APPLICANT: Zhou, Ping
APPLICANT: Goodrich, Ryle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     νο
: :
                                                                                                                                                                     290
                                                                                                                                                                                                                                                                    670
                                                                                                                                                                                                                                                                                                                                  610
                                                                                                                                                                                                                                                                                                                                                                                            550
                                                                                                                                                                                                                                                                                                                                                                                                                                                          490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         196
                                                                                                                                            790
                                                                                                                                                                                                                                                                                                   250
                                                                                                                                                                                                                                                                                                                                                             230
                                                                                                                                                                                                                                                                                                                                                                                                                         210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  76
                                                                                                                                           CysserAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CY8ValGlyValLy8AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLy8Asp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGCCATCATATGCAGAGAAAGAGGCAAAGATATCCAGGTCACTTGGGGCTAGTGTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAGACAGAGGCAAAATCAGTAAAGGCTTGGAGGATTTAAAAACGTGTTAGTCCAGTAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTGTTGGGGTCCTTGATTTTGAACAAGCACAGCTTGAAAGAATTGCTGATTCCAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAGGCTTGAAAACCTCCÁGTATCATAATTGCTCTGACAGATGGCAAGTTGGACGGTCTG
                                                                                                                                                                                                          GTGAGCTTTAATGGAGGAAAATCTGTCATTTCAGGATCATTAATTGTCACAGCCACAGAA
                                                                                                                                                                                                                                  ValSerMetAsnAspGlyLeuSerPheIleSerSerSerValIleIleThrThrThrHis
                                                                                                                                                                                                                                                                    AATTCTATGCTTTGTCCTGCACCTATCCTGAATAAAGCTGGAGAAACTCTTGATGTTTCA
                                                                                                                                                                                                                                                                                   CysSerPheLysIleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAsp
                                                                                                                                                                                                                                                                                                                                  TGCACTTACACTGTAAATGAAACATATACAACGAGTGTAAAACCAGTAAGTGTACAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8.77e-82
709.00
72.35%
52.65%
46.46%
                                                                               US/09799451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          x US-10-120-988-297 (1-1492)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1492
139
52
71
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      195
                                                                                                                                                                                                                                                                                                                                                                                              609
                                                                                                                                                                                                                                                                                                                                                                                                                                                          549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Asundi, Vinod
APPLICANT: Ren, Feiyan
APPLICANT: Zhang, Jie
APPLICANT: Xue, Aidong J.
APPLICANT: Xue, Aidong J.
APPLICANT: Xue, Aidong J.
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Zhiwei
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Tome
APPLICANT: Weng, Yonghong
APPLICANT: Weng, Yonghong
APPLICANT: Dranac, Radoje T.
TITLE OF INVENTION: No. 6783969el Nucleic
TITLE OF INVENTION: No. 6783969el Nucleic
TITLE OF INVENTION: No. 6783969el Nucleic
TITLE OF INVENTION NUMBER: US/09/799,451
CURRENT FILING DATE: 2001-03-05
NUMBER OF SEQ ID NOS: 948
SOFTWARE: pt-FL_genes Version 2.0
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 250
SEQ ID NO 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
 RESULT 6
US-08-286-889-45
; Sequence 45, Application
; Patent No. 5470953
                                                                                                                                           음 성
                                                                                                                                                                                               밁
                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                      5
                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scores:
                                                                                                                                                                                                                                                                                                                                                                                            363
                                                                                                                                            303
                                                                                                                                                                                                          243
                                                                                                                                                                                                                                                                      183
                                                                                                                                                                                                                                                                                                                                  123
                                                                             ThrThrThrHisCysSerAspGly
                                                                                                                                                             AlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSerSerSerValIleIle
                                                                                                                                                                                                        ServalGluAspThrTyrLeuLeuCysProAlaProIleLeuLysGluValGlyMetLys
                                                                                                                                                                                                                                                                        GACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTCAATGAGAAGCCCTTT
                                                                                                                                                                                                                                                                                   AspArgValLeuCysSerPheLysIleAsnAspSerValThrLeuAsnGluLysProPhe
                                                                                                                                                                                                                                                                                                                                  AlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArgHisAlaArgAsnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.84e-74
658.00
100.00%
100.00%
43.12%
                   US/08286889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-799-451-250 (1-3981)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3981
128
0
```

285

245

182

GENERAL INFORMATION:

```
Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2_COPY_28_320 (1-293) x US-08-286-889-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-286-889-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 314-TELEFAX: 25-3856
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 45:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
TENGTH: 3519 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NERAL INFORMATION W. MICH APPLICANT: Gallatin; W. MICH APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5470953el Human CEOS: 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/286,889
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: P38,659
REFERENCE/DOCKET NUMBER: 27866/32168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 233 Sc
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
                                                                                                                                                                                                                                                    541
                                                                                  661
                                                                                                                                                                                                                                                                                                                                      481
    721
                                                                                                                                                                    109
                                                                                                                                                                                                           48
                                         83
                                                                                                                           68
                                                                                                                                                                                                                                                                                             29
                                                                                                                                                                                                                                                                                                                                                                             10
                                                                                                                                                                                                                                                  GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG 600
                                                                                  TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                    GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu 102
                                                                                                                      LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu 82
                                                                                                                                                                                                         SerProGlnLeuArgMetSerPhelleValPheSerThrArgGlyThrThrLeuMetLys 67
                                                                                                                                                                                                                                                                                         ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 47
                                                                                                                                                                                                                                                                                                                                  ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal 28
                                                                                                                                                                AGCACCAGCACCTCGTTCTCCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
52..3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      single
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.54e-10
166.00
46.15%
28.21%
10.88%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08/286,889
  - ĠĠĆCTGĀĊĠŦĀĊĄCĄGCCTCĠĠĠĊĄTCCĄGĄĄĄGTGGTGĄĄĄ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                           3519
66
42
96
30
                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-485-618-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 45, Application US/08485618 Patent No. 5728533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION UNMBER: US 08/286,889
FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                     SOPTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,618
                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5728533el Human
                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                           TELEPHONE: 312-474-0448
                                                                                                                      NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                         APPLICATION NUMBER: US 08/362,652 FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 233 S
CITY: Chicago
                                         TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1102 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                997 AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     159 ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       140 ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    766 GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         103 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAGCT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGATGGGCAGAAATTCAGAGACCCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bershall, O'Toole, Gerstein, Murray & BorunSouth Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ----ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 110:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                           27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 Integrin Alpha
```

212

996

936

δ

문 S 밁

S 문 र् 밁

밁

S

```
RESULT 8
US-08-362-652-45
US-08-362-652-45
; Sequence 45, Application US/08362652
; Patent No. 5766850
; Patent No. 5766850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                              S
                                                                                                                                                                     8
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                        ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2_COPY_28_320 (1-293) x US-08-485-618-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-485-618-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Мо
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                            1051
                                                                                                                                                                           193
                                                                                                                                                                                                      997
                                                                                                                                                                                                                                   173
                                                                                                                                                                                                                                                             937
                                                                                                                                                                                                                                                                                                                      988
                                                                                                                                                                                                                                                                                                                                                     140
                                                                                                                                                                                                                                                                                                                                                                                826
                                                                                                                                                                                                                                                                                                                                                                                                           122
                                                                                                                                                                                                                                                                                                                                                                                                                                         766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                213
                                                                                                                                                                                                                                                                                         159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10
                                                                                                                                                                                                                                                                                                                     AAAGCT-----GGGATCATTCGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAGAGTGTCCAGGACAAGAGATGGACATTGCTTTCCTGATTGGCTCCGGCAGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProAlaCysTyrGly----GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                                                                                                ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                             ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                                CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                           ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuThrGluAspArg-----
                                                                                    GAGATGTCACAAGAAĠĠŤŤŤČAGCTCAĠĊŤCTCTCAATGĠÀŤ
                                                                                                                                                                         CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 212
                                                                                                                                                                                                      AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGCCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                 ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                           ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                         ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3519 base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDS
52..3519
                                                                                                                                              -ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.54e-10
166.00
46.15%
28.21%
10.88%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3519
66
42
96
30
                                                                                                                 226
                                                                                                                                                1101
                                                                                                                                                                                                                                                                                                                                                                                                              139
                                                                                                                                                                                                      1050
                                                                                                                                                                                                                                   192
                                                                                                                                                                                                                                                                                            172
                                                                                                                                                                                                                                                                                                                         936
                                                                                                                                                                                                                                                                                                                                                     158
                                                                                                                                                                                                                                                                                                                                                                                 885
                                                                                                                                                                                                                                                                                                                                                                                                                                           825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                67
                                                                                                                                                                                                                                                                996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          47
                                                                                                                Ś
                                                                                                                                                                         Ś
                            유
                                                     Ş
                                                                                      밁
                                                                                                                                                8
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                 Ś
```

```
US-09-970-076-2_COPY_28_320 (1-293) x US-08-362-652-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                              Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-362-652-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/172
FILING DATE: 23-DEC-1993
PRIOR APPLICATION NUMBER: US 08/286
APPLICATION NUMBER: US 08/286
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/362,65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEB: Marshall, O'Toole, Gerstein, Murray i
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: NO. 5766850el NUMBER OF SEQUENCES: 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
                                 661 TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                         601
                                                                                                                                                                                541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                              29 ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                    83
                                                                   68 LeuThrGluAspArg---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleic acid
GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                         ÁGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                          SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3519 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
52..3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 single
                                                                                                                                                                                                                                                                                                                                                               1.54e-10
166.00
46.15%
28.21%
10.88%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Þ
                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Version
                                                                     -GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Subunit
                                                                                                            660
                                                                                                                                              67
                                                                                                                                                                                  600
                                                                                                                                                                                                                     47
                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                         28
```

```
US-08-605-672-45
                                                                                                                                                                                                                                                                                                                                                     CLASSTPTOTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PALENTIN Release #1.0, V
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/605.677
CLASSTPTOTE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 45, Application Patent No. 5817515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent No.
                                                       CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
PILLING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
PILLING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILLING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 37,05699
REFERENCE/DOCKET NUMBER: 27866/32684
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5817515el Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 10
      TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1102 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             766 GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProvalAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3: Marshall, O'Toole, Gerstein, Murray &
233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               United States
                                            312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 110:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/08605672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         103
                                                                                                                                                                                                                                                                                                                                                                                             US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                   27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                      Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               936
RESULT 10
US-08-482-293A-45
; Sequence 45, App
                                                                                                                         ð
                                                                                                                                                                    밁
                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_28_320 (1-293) x US-08-605-672-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-605-672-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 4
SEQUENCE CHARACTERISTICS:
LENGTH: 3519 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
TOPOLOGY: lin
                                                                                                                                                                                                                                                                                                                                    937
                                                                                                                                                                                                                                                                                                                                                                                                                   988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                       213 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                           140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       103 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68 LeuThrGluAspArg-------GluGlnIleArgGlnGlyLeuGluGluLeu 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10 ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
                                                                                                                                                                                                          CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal
                                                                                                                                                                                                                                                                                         ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                                                                                                    CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGCT-----GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp----PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                        ---ThrGlnLeuAlaArgIle-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
    Application US/08482293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ss: single
linear
                                                                                                                                                                    - ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.54e-10
166.00
46.15%
28.21%
10.88%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels:
                                                                                                                                                                                                                                                                                                                                                             AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3519
66
42
96
30
```

212

192

996

172 936 158 885

139 825 121

102

765

67

600

660

47

28

밁

ঠ 밁

밁 S ঠ

Ś

밁

ঠ 밁 ঠ 밁 á

밁

825 121 765

102 720

```
S
                                                                                                                                                                                           S
                                                                                   유
                                                                                                                      Ś
                                                                                                                                                          밁
                                                                                                                                                                                                                               US-09-970-076-2_COPY_28_320 (1-293) x US-08-482-293A-45 (1-3519)
                                                                                                                                                                                                                                                                       Query Match:
DB:
             밁
                                                                                                                                                                                                                                                                                                         Best Local Similarity:
                                                                                                                                                                                                                                                                                                                          Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-482-293A-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No. 5831029
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 3519 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5831029el NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 530
PRIOR APPLICATION DATA:
US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 23-DEC-199:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US (
FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                 Мо.
:
                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 0: FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                          481
                                                                                   541
             109
                                                 48
                                                                                                                      29
                                                                                                                                                                                              10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nucleic acid
                                           SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 67
                                                                                                                  ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 47
                                                                                                                                                            ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal 28
             AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS
52..3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               single
                                                                                                                                                                                                                                                                       1.54e-10
166.00
46.15%
28.21%
10.88%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       45:
                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
                                                                                                                                                                                                                                                                                                         Conservative: Mismatches:
                                                                                                                                                                                                                                                                                          Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #1.25
                                                                                                                                                                                                                                                                     3519
66
42
96
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Subunit
                                                                                     600
                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-943-363-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 45, Application US/08943363
Patent No. 5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                          APPLICATION NUMBER: US/08/
FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTWARE: Patentin Re-lease #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5837478el
     FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 1. CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                      ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                          STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1102 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              159 ---ThrGlnLeuAlaArgIle-------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 886 AAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               766 GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTĞCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   103 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   213 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  997 AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  140 ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLy8Asp---PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83
                                                                                                                                                                                                                                                                                                                                                                                       60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCÁCTGCCCTÁCAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGATGGGCAGAAATTCAGAGACCCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                            233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                         United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                 Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC
                                                                      US 08/362,652
                                                                                                                            US 08/286,889
                                                                                                                                                                                                                                                        US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 - GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                               08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human
                                                                                                                                                                                                                                                                                                Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 Integrin Alpha Subunit
```

226

192

172 936 158 288

FEATURE:

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; NAME/KEY:
; LOCATION:
US-08-943-363-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2_COPY_28_320 (1-293) x US-08-943-363-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 3519 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661 TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                              ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                        ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp----PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGCTATTTCATAGCAAGAATGGGGCCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                         CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                         AAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                        ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGCAAATTCAGGAGAAA---
                                                                                                                                                                           ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                  ACAGATGGGCAGAAATTCAGAGACCCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                  CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.54e-10
166.00
46.15%
28.21%
10.88%
                                                            ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC
                                                                                                                                                                                                                                                                                                     -GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 45:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               - GGCCTGĂCGTĂCACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3519
66
42
96
30
12
                                                          1101
                                                                                                                                                                                  192
                                                                                                                                                                                                                                                                                                                                          158
                                                                                                                                                                                                                                                                                                                                                                                    885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                           Ś
                                                                                                                                                    δ
                                                                                                                                                                                                  문
                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 12
US-09-193-043-45
                                   밁
                                                                                                                     밁
                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_28_320 (1-293) x US-09-193-043-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NOMBER: US/09/193,043
CURRENT FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/43,363
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
NUMBER: 09 EQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-193-043-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 45, Applicate Patent No. 6251395
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Mus FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 6251395el Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: CDS
LOCATION: (52)..(3516)
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Мо
:
  140
                                                                                                                                                               103
                                                                                                                                                                                                                                                                                  661 TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                               109
                                                                                                                                                                                                                                                                                                                                                                                                                                             541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                            83
                                                                                                                                                                                                                                                                                                                      68 LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                       48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10 ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu
                                       ACAGATGGGCAGAAATTCAGAGACCCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                             ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                     GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                           GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                          GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                                                  AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                   SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.54e-10
166.00
46.15%
28.21%
10.88%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/09193043
                                                                                                                                                                                                    GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    얁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Artificial Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    351
42
96
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    primer
  158
                                       885
                                                                               139
                                                                                                                         825
                                                                                                                                                                                                                                            102
                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28
                                                                                                                                                               121
                                                                                                                                                                                                    765
                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                          82
                                                                                                                                                                                                                                                                                                                                                                  660
```

109

**4**8

8

541

481

5

S 밁 ફ 밁 ঠ 밁 Ś 문 S 밁 δ 밁 S 밁 S 밁 S 용 S 밁 S 밁 S

213

997 173 937 159 986 140 826 766 103 721

Ś

밁

Ś 멍 ş 밁 8 8

밁

660

```
RESULT 13
US-09-688-307A-45
                                                                                                                                                                                                                            US-09-970-076-2_COPY_28_320 (1-293) x US-09-688-307A-45 (1-3519)
                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-688-307A-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 45, Application US/09688307A Patent No. 6432404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 6432404el Human Beta-2
FILE REFERENCE: 27866/36646
CURRENT APPLICATION NUMBER: US/09/688,307A
CURRENT FILING DATE: 2000-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 08/173,497
PRIOR FILING DATE: 1993-12-23
PRIOR APPLICATION NUMBER: 08/286,889
PRIOR FILING DATE: 1994-08-05
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR FILING DATE: 1994-12-21
PRIOR FILING DATE: 1994-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1998-11-16
PRIOR APPLICATION NUMBER: 08/605,672
PRIOR FILING DATE: 1996-02-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 09/193,043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Description of Artificial Sequence: primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: (52)..(3516)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       213 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         159
                                                                                                                                         481
                                             541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                     10
                                                                                           29
  48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAGCT-----GGGATCATTCGCTATACGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---ThrGlnLeuAlaArgIle-----AlaAspSerLysAspHisValPhe 172
                                                                                         ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                     ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal
SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 67
                                                                                                                                         -----ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1997-10-03
                                                                                                                                                                                                                                                                                                    1.54e-10
166.00
46.15%
28.21%
10.88%
                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
                                                                                                                                                                                                                                                                                                                               Mismatches:
                                                                                                                                                                                                                                                                                                                                                     Conservative:
                                                                                                                                                                                                                                                                                 3519
66
42
96
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             996
                                                                                              47
                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-350-259-45; Sequence 45, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                             US-09-350-259-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 45, Application US/09350259
Patent No. 6620915
GENERAL INFORMATION:
                                                                                                                                                                                                             SEQ ID NO 45
LENGTH: 3519
                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/350,259
CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/93,043
EARLIER FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER APPLICATION NUMBER: 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 6620915el Human 2
                                                                                                                                                                                                                                                                               EARLIER FILING DATE: 1994-12-21
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                       EARLIER APPLICATION NUMBER: 08/362,652
EARLIER FILING DATE: 1994-12-21
                                                                                                                                                                                                                                                                                                                                                                                                     EARLIER FILING DATE: 1994-08-05
                                                FEATURE: OTHER INFORMATION: Description of Artificial Sequence: primer
                                                                                              NAME/KEY: CDS
LOCATION: (52)..(3516)
                                                                                                                                            ORGANISM: Mus musculus FEATURE:
                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 103 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        213 ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             173 ProvalAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68 LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp----PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGCAAATTCAGGAGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGCT-----GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1143
```

1050

172 936 158 288 825

139

765 102

121

ą В ঠ 밁 ঠ

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                            RESULT 15
US-08-485-618-52
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ई
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_28_320 (1-293) x US-09-350-259-45 (1-3519)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                               Sequence 52, Application US/08485618
Patent No. 5728533
GENERAL INFORMATION:
                                                    APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5728533el Human 2 Integrin
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & |
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
               STREET: 233 Sout
CITY: Chicago
STATE: Illinois
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1051
                                                                                                                                                                                                                                                                                                                                                                                                     1102 GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541 GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGGTGGGCAAT---TTTGTAGCACTTCGCAGCATCCAGCGCAAATTCAGGAGAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ---ThrGlnLeuAlaArgIle------AlaAspSerLysAspHisValPhe 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaasn 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuThrGluAspArg------GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAsp---PheAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGATGGGCAGAAATTCAGAGACCCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAA-----GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAACATCCTGAAGACTCATTTTACC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal 28
United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCTTTGCCATTGAAGGAACCGAATCAAGGTCAAGTAGTTCCTTTCAGCAC 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.54e-10
166.00
46.15%
28.21%
10.88%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative:
                                                                                                                                                                        Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3519
66
42
96
30
12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
                                                               Ś
                                                                                                                      밁
                                                                                                                                                              S
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-485-618-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., JOSEPh A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucrear strandedness: single strandedness: single strandedness: single strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedness: strandedn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: 312-4.
TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM:
                     715
                                                                    103 GlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeu
                                                                                                                                                                                                                        610 TTCACGGAATTCAAGAGCAGCCTGAGCCCTCAGAGCCTGGTGGATGCCATCGTCCAGCTC
                                                                                                                                                                                                                                                                                                                         550
                                                                                                                                                                                                                                                                                                                                                                                                                             490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 430
                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                           48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10
                     GAGCTATTTCATAGCAAGAATGGGGCCCGAAAAAGTGCCAAGAAGATACTAATTGTCATC
                                                                                                                                                        GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                             GATCAAAGTGACTTTACCCAGATGAAGGACTTCGTCAAAGCTTTGATGGGCCAGTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal 28
                                                                                                                                                                                                                                                                  LeuThrGluAspArg-----
                                                                                                                                                                                                                                                                                                                         AGCACCAGCACCTCGTTCTCCCTGATGCAATACTCAAAACATCCTGAAGACTCATTTTACC
                                                                                                                                                                                                                                                                                                                                                                      SerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLys 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ---LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3803 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.74e-10
166.00
46.15%
28.21%
10.88%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08/173,497
                                                                                                                      GGCCTGACGTACACAGCCTCGGGCATCCAGAAAGTGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   x US-08-485-618-52 (1-3803)
                                                                                                                                                                                                                                                                  -----GluGlnIleArgGlnGlyLeuGluGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3803
42
96
12
```

102

599 82

714

909

Search Job ti	망	ş	8	Ş	뭣	Ş	문	ş	В	δ	망	δ
complet me : 223	1051	213	1000	193	946	173	886	159	835	140	775	122
Search completed: December 18, 2005, 07:34:18 Job time : 223.707 secs	GAGATGTCACAAGAAGGTTTCAGCTCAGCTCTCTCAATGGAT 1092	ValValArgGlyAsnGlyPheArgHisAlaArgAsnValAsp 226	Arcttrgccattgaaggaaccgaatcaaggtcaagtagtrcctttcagcac 1050	193 CysIleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnVal 212	AAGGTGGGCAATTTTGTAGCACTTCGCAGCATCCAGCGGCAAATTCAGGAGAAA 999	ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 192	886 CCCACTGCCCTACAGGAGCTGAACACCATTGGCTCAGCTCCCTCGCAGGACCACGTGTTC 945	ThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhe 172	AAAGCTGGGATCATTCGCTATGCTATAGGGGTGGGAGATGCCTTCCGGGAA 885	ArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGlu 158	ACAGATGGGCAGAAATTCAGAGACCCCCTGGAGTATAGACATGTCATCCCTGAAGCAGAG 834	ThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn 139

Run on:

Sequence 176, App
Sequence 231, App
Sequence 231, App
Sequence 231, App
Sequence 23, App1
Sequence 23, App1
Sequence 15, App1
Sequence 15, App1
Sequence 15, App1
Sequence 19, App1
Sequence 19, App1
Sequence 1, App1
Sequence 1, App1
Sequence 1, App1
Sequence 1, App1
Sequence 1, App1
Sequence 1, App1
Sequence 9957, App
Sequence 9957, App
Sequence 9957, App
Sequence 9957, App
Sequence 9957, App
Sequence 186, App
Sequence 9957, App
Sequence 210, App1
Sequence 210, App1
Sequence 21, App1
Sequence 25, App1
Sequence 25, App1
Sequence 25, App1
Sequence 25, App1
Sequence 21, App1
Sequence 21, App1
Sequence 21, App1
Sequence 21, App1
Sequence 21, App1
Sequence 21, App1
Sequence 21, App1
Sequence 31, App1
Sequence 31, App1
Sequence 33, App1
Sequence 33, App1
Sequence 33, App1
Sequence 33, App1
Sequence 33, App1
Sequence 33, App1

```
-MODEL-frame+ p2n.model - DEV=xlh
-MODEL-frame+ p2n.model - DEV=xlh
-Q=/cgn2 1/USPTO spool/US09970076/runat 14122005 111852 21035/app query.fasta_1.2410
-Q=/cgn2 1/USPTO spool/US09970076/runat 14122005 111852 21035/app query.fasta_1.2410
-DB=PublIshed_Applications_NA_Main -QFMT=fastap -SUFPIX=rnpbm -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=blts -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DCALIGN=200 -THR SCORE=pct -THR MAX=100
-THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=ptc -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=200000000 -USER-US0970076 @CGN 1 1 2715 @runat 14122005 111852 21035
-NCPU=6 -ICPU=3 -NO_MAAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 st
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Command line parameters:
                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                           Score
    1526
1526
1526
1526
1526
1526
1526
1526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   seq length: 0
seq length: 2000000000
                                                                                                                                                                                                             Published_Applications_NA_Main:*

1: /cgn2_6/ptodata/1/pubpna/USO7_PUBCOMB.seq:*

2: /cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*

3: /cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*

4: /cgn2_6/ptodata/1/pubpna/USO9A_PUBCOMB.seq:*

5: /cgn2_6/ptodata/1/pubpna/USO9A_PUBCOMB.seq:*

6: /cgn2_6/ptodata/1/pubpna/USO9A_PUBCOMB.seq:*

7: /cgn2_6/ptodata/1/pubpna/USOA_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/USOA_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/USOA_PUBCOMB.seq:*

10: /cgn2_6/ptodata/1/pubpna/USOA_PUBCOMB.seq:*
                                                                                                         Query
Match
    BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_28_320
1526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           December 18, 2005, 07:35:12; Search time 938.696 Seconds (without alignments) 2581.163 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9793542 seqs, 4134689005 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QGGRREDGGPACYGGFDLYF.....DGLSFISSSVIITTHCSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd
                                                                                                          Length
   1414
1454
1454
1674
1674
5540
5540
                                                                                                           BB
 0 US-11-047-278-1

US-10-133-937-58

US-10-159-563-58

US-10-038-307-17

US-10-201-292-17

US-09-918-715-231

US-09-918-715-231

US-10-301-822-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bummaries
                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . . . . .
Sequence 1, Appli
Sequence 58, Appl
Sequence 58, Appl
Sequence 17, Appl
Sequence 17, Appl
Sequence 176, App
Sequence 231, App
Sequence 231, App
                                                                                                          Description
                                                                                                                                                                APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert A.
APPLICANT: Collier, Robert A.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor FILE REFERENCE: 960296.97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: 00/251,481
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
                                                                                                                                                                                                                                                                                                                                                              RESULT 1
US-11-047-278-1
   Percent Similarity:
                           Pred. No.:
                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/11047278 Publication No. US20050196407A1 GENERAL INFORMATION:
                                                                                                                      SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
LENGTH: 1414
TYPE: DNA
                                                                       FEATURE:
NAME/KEY: CDS
LOCATION: (104)..(1207)
                                                                                                           ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                            6.33e-185
1526.00
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-474-794-176
US-10-979-159-231
US-10-979-159-231
US-10-979-159-231
US-10-201-292-23
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-13
US-10-201-292-23
US-10-201-292-23
US-10-201-292-23
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-10-201-292-33
US-11-201-292-33
US-11-201-292-33
US-11-201-292-33
                                                                                                                                                                                                                                                                                                                                                                                                 ALIGNMENTS
  Length:
Matches:
Conservative:
```

**Database** :

Regult No.

```
Best I
Query
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                            음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                             RESULT 2
US-10-133-937-58
                                                                                                 밁
                                                                                                                   Ş
                                                                                                                                             음 성
                                                                                                                                                                                        밁
                                                                                                                                                                                                                S
                                                                                                                                                                                                                                        유 성 유
                                                                                                                                                                                                                                                                                                                                                             5
Sequence 58, Application US/10133937
Publication No. US20030207278A1
GENERAL INFORMATION:
APPLICANT: Khan, Javed
APPLICANT: Ringner, Markus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Si
y Match:
                                                                                                 1025
                                                                                                                                                  965
                                                                                                                                                                                                905
                                                                                                                                                                                                                                                845
                                                                                                                                                                                                                                                                                                                                                                                               665
                                                                                                                                                                                                                                                                                                                                                                                                                                              605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            245
                                                                                                                        281
                                                                                                                                                                       261
                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                                                               785
                                                                                                                                                                                                                                                                                                                       201
                                                                                                                                                                                                                                                                                                                                               725
                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                                                                                                                                                                                                                                                                                                           LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuThräspGlyGluLeuHisGluäspLeuPhePheTyrSerGluärgGluälaäsnärg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAGGGGGACGCAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                                AsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys
                                                                                                                                                                                                                                                           HisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu
                                                                                                                                                                                                                                                                                                            ProSerThrI1eCysAlaGlyGluSerPheGlnValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                                                                                                                                                                                             CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                              LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACC
                                                                                                                                                                                                 AATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAA
                                                                                                                                                                                                                                                CATGCCCGCAACGTGGACAGGGT
                                                                                                                                                                                                                                                                                                CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                                                                                                                                                                                 CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTCGAGATCTTGGTGCAATTGTTTACTGTGTGTGTGAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-11-047-278-1 (1-1414)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    000
                                                                                                                          293
                                                                                                                                                   1024
                                                                                                                                                                          280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              244
                                                                                                                                                                                                  964
                                                                                                                                                                                                                                                   904
                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                  844
                                                                                                                                                                                                                                                                                                                         220
                                                                                                                                                                                                                                                                                                                                                 784
                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                724
                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment
Pred. No.:
                                                                                                                                                                                                                                           뮍
                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-2_COPY_28_320
                                         닭
                                                                   Ş
                                                                                                 밁
                                                                                                                  S
                                                                                                                                           문
                                                                                                                                                                    Ş
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-133-937-58
     음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 58
LENGTH: 1454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Peterson, Carsten
APPLICANT: Meltzer, Paul
TITLE OF INVENTION: METHODS FOR ANALYZING HIGH DIMENSIONAL DATA FOR CLASSIFYING,
TITLE OF INVENTION: DIAGNOSING, PROGNOSTICATING, AND/OR PREDICTING DISEASES AND
TITLE OF INVENTION: OTHER BIOLOGICAL STATES
FILE REFERENCE: 11613_56USO1
CURRENT APPLICATION NUMBER: US/10/133,937
CURRENT FILING DATE: 2002-11-04
NUMBER OF SEQ ID NOS: 99
SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   No.:
                                                                                                                                                                                                                                                   585
                                                                                                                                                                                                                                                                                                   525
                                                                                                                                                                                                                                                                                                                                                                                                                                                345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                225
     885
                                                                           201
                                                                                                                          181
                                                                                                                                                                          161
                                                                                                                                                                                                  645
                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                  465
                                                                                                                                                                                                                                                                                                                                                                                                 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 285 ATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAA
                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                                                                                                                                                                                                                                                                                                  GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAGGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
      HisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu 240
                                                                ProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArg
                                                                                                                 LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu
                                                                                                                                                                LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                   SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                 LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                  SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAla
                                                                                                                                                                                                                                                                                                                                                                                                CGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                              ArgGlyThrThrLeuMetLy8LeuThrGluAspArgGluGlnIleArgGlnGlyLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCACC
     CATGCCCGCAACGTGGACAGGGTCCTCTGCAGCT
                                                    CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                    CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                    CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                   TCTCGAGATCTTGGTGCAATTGTTTACTGTGTGTGTGAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6.61e-185
1526.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-133-937-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1454
293
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (1-1454)
```

344

284

140

824 200

884

180 704 160 644

764

120

584

100

524

80 404 60

704

```
Sequence 58, Application US/10159563

Publication No. US20040009154A1

GENERAL INFORMATION:
APPLICANT: Khan, Javed
APPLICANT: Heterson, Carsten
APPLICANT: Meltzer, Paul

TITLE OF INVENTION: DIAGNOSIS AND FOR TARGETING THE THERAPY OF SELECT CANCERS
FILE REFERENCE: 11613.56USI1

CURRENT APPLICATION NUMBER: US/10/159,563

CURRENT APPLICATION NUMBER: US/10/159,563

CURRENT APPLICATION NUMBER: US/10/133,937

PRIOR APPLICATION NUMBER: US 10/133,937

PRIOR APPLICATION NUMBER: US 10/133,937

PRIOR PILING DATE: 2002-04-25

NUMBER OF SEQ ID NOS: 444

SOFTWARE: Patentin version 3.1

SEQ ID NO 58

LENGTH: 1454

TYPE: DNA

ORGANISM: Homo Sapiens
                                                                                                                                                                   밁
                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                   S
                                                  밁
                                                                          8
                                                                                                             밁
                                                                                                                                    र्
                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                              용
                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-2_COPY_28_320 (1-293) x US-10-159-563-58 (1-1454)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
US-10-159-563-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1005
                                                                                                                                                                                                                                                                                            285
                     121
                                                                                                             465
                                                                                                                                                                         405
                                                                                                                                                                                                                                       345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             281
                                                                               101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261
                                                                                                                                           81
                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                             ۲
LeuThrAspG1yG1uLeuHisG1uAspLeuPhePheTyrSerG1uArgG1uA1aAsnArg
                                                                                                                                                                        GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                                                                                                                                                                                                                                                               GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                   SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVallleIleAla
                                                                                                                                 GluLeuGlnLygValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                                                   IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAGGGGGACGCAGGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerSerValIleIleThrThrThrHisCysSerAspGly 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                       6.61e-185
1526.00
100.00%
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                             120
                                                                                                                                           100
                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                              40
                                                584
                                                                                                            524
                                                                                                                                                                         464
                                                                                                                                                                                                                                   404
                                                                                                                                                                                                                                                                                                 344
                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1004
                                                                                                                                                                                                                                                                                                                                                      RESULT 4

US-10-038-307-17

Sequence 17, Application US/10038307

Publication No. US20030134786A1

GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN

APPLICANT: Therea L. O'KEEFE
APPLICANT: Engin OZKAYNAK

APPLICANT: Judith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Con

FILE REFERENCE: 7853-253-999

CURRENT APPLICATION NUMBER: US/10/038,307

CURRENT FILING DATE: 2002-06-28

NUMBER OF SEQ ID NOS: 26

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 17
                                                                                                                                                                                                                                                                                               ; LENGTH: 1674
; TYPE: DNA
; ORGANISM: Homo s
US-10-038-307-17
                                      र्
                                                                             문
                                                                                                     S
                   よ
                                                                                                                                      US-09-970-076-2_COPY_28_320 (1-293) x US-10-038-307-17 (1-1674)
                                                                                                                                                                                      Query Match:
                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                     No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1005
                   154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      221 HisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu 40
                                                                                               GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerSerVallleIleThrThrThrHisCysSerAspGly 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluValGlyMetLy8AlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuAlaArgIleAlaAspSerLygAspHisValPheProValAsnAspGlyPheGlnAla 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCC 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGAGAAGCCCTTTTCTGTGGAAGACACTTATTTACTGTGTCCAGCGCCTATCTTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGCCCGCAACGTGGACAGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                      8.28e-185
1526.00
100.00%
100.00%
100.00%
                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Compositions
```

1004

260 944 240

884 220 824 200 764

Ś 밁 S 밁 5 밁 ş

```
RESULT 5
US-10-201-292-17
Sequence 17, Application US/10201292
Publication No. US20030144193A1
GENERAL INFORMATION:
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKANAK
APPLICANT: UNGIN J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 (FILE REFERENCE: 7853-253-99)
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 17
LENGTH 1674
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                          874
                                                                                                                                                                                                                                                                                                                    814
                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                     694
                                                                                                                                                                                                                                                                                                                                                                                                                                              634
                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             214
                                                                                                                                                                                                                                  934
                                                                                                                                                                                                                                                     281
                                                                                                                                                                                                                                                                                              261
                                                                                                                                                                                                                                                                                                                                                           754
                                                                                                                                                                                                                                                                                                                                                                                221
                                                                                                                                                                                                                                                                                                                                                                                                                         201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGlu
                                                                                                                                                                                                                                 SerSerValIleIleThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                                               AsmGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys
                                                                                                                                                                                                                                                                                                                                                                        HisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVallleIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAA
                                                                                                                                                                                                                                                                                     GluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer
                                                                                                                                                                                                                                                                                                                                                             CATGCCCGCAACGTGGACAGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTC
                                                                                                                                                                                                                                                                                                                                                                                                      CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                  ProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCT
                                                                                                                                                                                                                                                                                                                    AATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTAAAA
                                                                                                                 216
                                                                                                                  Compositions and
                                                                                                                                                                                                                                                      293
                                                                                                                                                                                                                                    972
                                                                                                                   Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      333
                                                                                                                                                                                                                                                                                                                                                                                                                                                693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               273
                                                                                                                                                                                                                                                                              933
                                                                                                                                                                                                                                                                                                 280
                                                                                                                                                                                                                                                                                                                      873
                                                                                                                                                                                                                                                                                                                                         260
                                                                                                                                                                                                                                                                                                                                                              813
                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                      753
                                                                                                                                                                                                                                                                                                                                                                                                                           220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment (
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
RESULT 6
US-09-918-715-176
; Sequence 176, Application US/09918715
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                        닭
                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                В
                                                                                                                                                                                    δ
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                              Ş
                                           문
                                                          S
                                                                                   밁
                                                                                                S
                                                                                                                        В
                                                                                                                                            Ś
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 154
                                                                                                                                                                                                                                                      394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        214
                                                                                                         261
                                                                                                                              814
                                                                                                                                                  241
                                                                                                                                                                       754
                                                                                                                                                                                          221
                                                                                                                                                                                                                694
                                                                                                                                                                                                                                    201
                                                                                                                                                                                                                                                                                                 574
                                                                                                                                                                                                                                                                                                           161 LeunlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                    454
                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                           934
                                                               281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAGGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                           SerSerValIleIleThrThrThrHisCysSerAspGly
                                                                                                 GluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer
                                                                                                                             AsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys
                                                                                                                                                                       CATGCCCGCAACGTGGACAGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTC
                                                                                                                                                                                    HisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu
                                                                                                                                                                                                               ProSerThrIleCysAlaGlyGluSerPheGlnValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                                                                                                 CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                           TCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                     SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                     LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTTCTGTCATCATCACCACACACACTGTTCTGACGGT
                                                                                     GAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8.28e-185
1526.00
100.00%
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  x US-10-201-292-17 (1-1674)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1674
293
0
0
                                              972
                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40
                                                                                                                                                                                                                                                                               200
                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                              453
                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            153
                                                                                                                                                                          813
                                                                                                                                                                                            240
                                                                                                                                                                                                                 753
                                                                                                                                                                                                                                      220
                                                                                                                                                                                                                                                            693
                                                                                                                                                                                                                                                                                                     633
                                                                                                                                                                                                                                                                                                                                                                                      513
                                                                                                                                                                                                                                                                                                                                                                                                          140
```

ર્ક

S 밁 δ 밁 ર્ 밁

밁 δ 밁

933

873 260 Ś 片 δ

밁

S 밁 Ş 밁

밁

Publication No. US20030017157A1 GENERAL INFORMATION:

```
FILE REFERENCE: 1107.00134

CURRENT APPLICATION NUMBER: US/09/918,715

CURRENT FILING DATE: 2001-08-01

PRIOR APPLICATION NUMBER: 60/222,599

PRIOR FILING DATE: 2000-08-02

PRIOR APPLICATION NUMBER: 60/224,360

PRIOR FILING DATE: 2000-08-11

PRIOR FILING DATE: 2000-04-11

NUMBER OF SEQ ID NOS: 358

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 176

LENGTH: 5540

TYPE: DNA

ORGANISM: Homo sapiens

US-09-918-715-176
 밁
                      ક
                                                         밁
                                                                                   ঠ
                                                                                                                  밁
                                                                                                                                         ঠ
                                                                                                                                                                         밁
                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2_COPY_28_320 (1-293) x US-09-918-715-176 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
                            181
                                                                                                                  645
                                                                                                                                             141
                                                                                                                                                                            585
                                                                                                                                                                                                                                    525
                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                              465
                                                                                                                                                                                                                                                                                                                                                      405
                                                                                                                                                                                                                                                                                                                                                                                                               345
   765
                                                           705
                                                                                     161
                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        285
                                                                                                                                                                                                                                                                                                                         18
                                                                                                                                                                                                                                                                                                                                                                                  13
                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              μ
                                                                                                                                                                                                                                                                                                                                                                                                                              GlnLeuAlaHisLy8PheIleSerProGlnLeuArgMetSerPheIleValPheSerThr 60
                LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu 200
                                                                         LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                  SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                           LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg 140
                                                                                                                                                                                                                                                   SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAla 120
                                                                                                                                                                                                                                                                                                                                                                     ArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGlu 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                                                                                                                          AGTGAGCAGATTTATTATGANAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTGCT
                                                                                                                                                                                                                                                                                           GluLeuGlnLy8ValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla 100
                                                                                                                                                                                                                                                                                                                                                                                                               CAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAGGGGACGCAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                                                  TCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.57e-184
1526.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0000
                                                                                     180
                                                                                                                                             160
                                                                                                                                                                          644
824
                                                        764
                                                                                                                  704
                                                                                                                                                                                                                                    584
                                                                                                                                                                                                                                                                                            524
                                                                                                                                                                                                                                                                                                                                                     464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       344
                                                                                                                                                                                                                                                                                                                                                                                                               404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
```

```
GENERAL INFORMATION:
APPLICANT: Best Vogelstein
APPLICANT: Best Vogelstein
APPLICANT: Kenneth Kinzler
ITILE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134
CURRENT APPLICATION NUMBER: US/09/918,715
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 358
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 231
LENGTH: 5540
TYPE: DNA
ORGANISM: Homo sapiens
                                                               S
                                                                                                                                                                    밁
                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity:
Query Match:
                          밁
                                                                                                     밁
                                                                                                                                 S
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 7
US-09-918-715-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                               Score:
                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 231, Application No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1065
                                 405
                                                                                                     345
                                                                                                                                                                    285 ATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAA
                                                                                                                                                                                                                                        225 CAAGGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    281 SerSerVallleIleThrThrThrHisCysSerAspGly 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             201
 81
                                                                 61
                                                                                                                                     41
                                                                                                                                                                                      21 IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                                                                                                                                                                                                                        ш
GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                   ArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGlu
                                                                                                      CAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCACC
                                                                                                                      GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                                                                                                                                           GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluValGlyMetLy8AlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09918715
o. US20030017157A1
                                                                                                                                                                                                                                                                                                                                                      5.57e-184
1526.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                         x US-09-918-715-231 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                           Mismatches:
Indels:
                                                                                                                                     60
                                                                                                                                                                                                      40
                                 464
                                                                   80
                                                                                                      404
                                                                                                                                                                      344
                                                                                                                                                                                                                                        284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         884
```

```
APPLICANT: MAILEMANN.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Momahan, John E.
APPLICANT: Momahan, John E.
APPLICANT: Hibodeau, Stephen N.
APPLICANT: Hibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, KITS, AND
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILLE REFERENCE: MPMO1-029P2RNM
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US/10/301,822
CURRENT FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 198
LENGTH: 5540
TYPE: DNA
                                                                                                                                                                                                                                                           Sequence 198, Application US/10301822
Publication No. US20030148410A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals, If
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Thibodeau, Stephen N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 8
US-10-301-822-198
                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVallIeIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProSerThrIleCysAlaGlyGluSerPheGlnValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTCGAGATCTTGGTGCAATTGTTTACTGTGTGTGTGAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTTCTGTCATCATCACCACACACACTGTTCTGACGGT 1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerSerVallleIleThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTATCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                                                            PREVENTION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; NAME/KEY: CDS
; LOCATION: (14
US-10-301-822-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                               吊
                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                 δ
                                                                                                    밁
                                                                                                                             Ş
                                                                                                                                                          문
                                                                                                                                                                                5
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           345 CAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTTCTCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      225 CAAGGGGGACGCAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                                                                                            885
                                                                                                                                                                                                                825
                                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                       765
                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                               705
                                                                                                                                                                                                                                                                                                                                                       161
                                                                                                                                                                                                                                                                                                                                                                                  645
                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 285 ATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAA
                                                                                                                                                                                     221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81 GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDS
(144)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                GluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer
                                                                                                    AsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys
                                                                                                                                                          ProSerThrIleCyBAlaGlyGluSerPheGlnValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                                                                       CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                     LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu
                                                                                                                                                                                                                                                                                                                                            LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                  TCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                                                 SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGACTGATGGAGAACTCCATGAAGATCTCTTTTTTTTATTCAGAGAGGGGAGGCTAATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerSerValIleIleThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                                            CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.57e-184
1526.00
100.00%
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             x US-10-301-822-198 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5540
293
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                      1064
                                                                              280
                                                                                                         1004
                                                                                                                                                                                        240
                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                  200
                                                                                                                                                                                                                                                                                                                                                                                                                                          644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40
                                                                                                                                   260
                                                                                                                                                                944
                                                                                                                                                                                                                     884
                                                                                                                                                                                                                                                                          824
                                                                                                                                                                                                                                                                                                                                764
                                                                                                                                                                                                                                                                                                                                                                                    704
```

밁

240

884

944

824

```
APPLICANT: Carbon-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: St. Croix, Bert
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PATTERNS
FILTE REFERENCE: 1107.00179
CURRENT APPLICATION NUMBER: US/10/474,794
CURRENT FILING DATE: 2003-10-14
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR APPLICATION NUMBER: 60/382,850
PRIOR APPLICATION NUMBER: 60/308,829
PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 359
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 176
LENGTH: 5540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2_COPY_28_320 (1-293) x US-10-474-794-176 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    / TYPE: DNA
/ ORGANISM: Homo sapiens
US-10-474-794-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-474-794-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 176, Applic Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1065 AGTTCTGTCATCACCACCACACACTGTTCTGACGGT 1103
                                                                                 645
                                                                                                                        141
                                                                                                                                                                585
                                                                                                                                                                                                     121
                                                                                                                                                                                                                                               525
                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                          465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    345
      705
                                         161
                                                                                                                                                                                                                                                                                                                                                                                                         405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   225 CAAGGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleLeuAapLyaSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                                                                                                                                                                                                                                 GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                                                                                                                                                              ArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGlu
      CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                             LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                          SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                         LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                                    SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAla
                                                                                                                                                                                                                                                                                                                          CGAGGAACAACCTTAATGAAACTGACAGAGAGAGAGAGAACAAATCCGTCAAGGCCTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTTTGGACANATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/10474794
o. US20040213793A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.57e-184
1526.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                         180
                                                                                                                        160
                                                                                                                                                                                                     140
                                                                                                                                                                                                                                           584
                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                          524
                                                                                                                                                                                                                                                                                                                                                                100
                                                                                                                                                                                                                                                                                                                                                                                                       464
                                                                                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40
                                                                               704
                                                                                                                                                                644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                       맑
                                                                      8
                                                                                                                        밁
                                                                                                                                                          δ
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; SOFTWARE: FastSEQ for Windows Version
; SEQ ID NO 231
; LENGTH: 5540
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-474-794-231
                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_28_320 (1-293) x US-10-474-794-231 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: 1107.00179

CURRENT APPLICATION NUMBER: US/10/474,794

CURRENT FILING DATE: 2003-10-14

PRIOR APPLICATION NUMBER: 60/282,850

PRIOR FILING DATE: 2001-04-11

PRIOR APPLICATION NUMBER: 60/308,829

PRIOR FILING DATE: 2001-08-01

NUMBER OF SEQ ID NOS: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-474-794-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 231, Applic Publication No. US20 GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Carson-Walter, Eleanor
APPLICANT: St. Croix, Brad
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1005
                                         345
                                                                                                                      285 ATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAA
                                                                                                                                                                                                     225 CAAGGGGGAGGAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        221 HisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu
                                                              41 GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
61 ArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGlu
                                                                                                                                             21 IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                                                                                                                                                                        1 GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTTCTGTCATCATCACCACCACACTGTTCTGACGGT 1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerSerValllelleThrThrThrHisCysSerAspGly 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCC 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArg 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/10474794
o. US20040213793A1
                                                                                                                                                                                                                                                                                                                                       5.57e-184
1526.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
```

ঠ 용 ş

र् 밁 ş 밁

밁

80 40 60 40 284 20

344

ঠ

5540 293 0 0

밁 र् 뭐

밁

á

밁 S 밁 á

```
Sequence 176, Application US/10979159
Sequence 176, Application US/10979159
Publication No. US20050142138A1
GENERAL INFORMATION:
APPLICANT: Brad St. Croix
APPLICANT: Brad St. Croix
TITLE OF INVENTION: ENDOTHELIAL CELL EXPRESSION PAT
FILE REFERENCE: 1107,00134
CURRENT APPLICATION NUMBER: US/10/979,159
CURRENT FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: US/09/918,715
PRIOR APPLICATION NUMBER: US/09/918,715
PRIOR APPLICATION NUMBER: 60/222,599
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR APPLICATION NUMBER: 60/224,360
PRIOR FILING DATE: 2000-08-02
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEG ID NOS: 358
SOFTWARE: FASTSEQ for Windows Version 3.0
SEG ID NO 176
LENGTH: 5540
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                             RESULT 11
US-10-979-159-176
                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                    1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 405
                                                                                                                                                                                                                                                                                                                                                                           281
                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                     945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                    GluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerSerVallleIleThrThrThrHisCysSerAspGly 293
                                                                                                                                                                                                                                                                                                                                                                                                    GAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProSerThrI1eCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                     AGTTCTGTCATCATCACCACCACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    464
                                                                                                                                                                                                                                                                                                                                                                                                       1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                       S
                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_28_320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-979-159-176
                                                                                 밁
                                                                                                         Ş
                                                                                                                                   밁
                                                                                                                                                                                     밁
                                                                                                                                                                                                                                  밁
          RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           No.:
                                  1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 405
                                                                                                                                     645
                                                                                                                                                                                                                                                                                                                                                                                                                                             585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     225
                                                        281
                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                           765
                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                          705
                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuThraspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                           SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerGluGlnI1eTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValI1eI1eAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAGGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                   GluvalGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer 280
                                                                                                                                                                                     CAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACC
                                                SerSerValllelleThrThrHisCysSerAspGly 293
                                                                                                                                                                                                                                         CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                                                                                      ProSerThrI1eCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                                                                                          CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                       LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu
                                                                                                                                                                                                                                                                                                                                          CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                                        LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5.57e-184
1526.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     x US-10-979-159-176 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5540
293
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       284
                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                               644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     344
                                                                                                                                                                                        944
                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                          884
                                                                                                                                                                                                                                                                                            824
                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                            764
                                                                                                                                                                                                                                                                                                                                                                                              704
                                                                                                                                                                                                                                                                                                                                                                                                                       160
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/979,159
CURRENT FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: US/09/918,715
PRIOR FILING DATE: 2001-08-01
PRIOR PPLICATION NUMBER: 60/222,599
PRIOR PPLICATION NUMBER: 60/224,360
PRIOR PPLICATION NUMBER: 60/224,360
PRIOR PPLICATION NUMBER: 60/224,360
PRIOR PPLICATION NUMBER: 60/24,360
PRIOR PRILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/282,850
PRIOR PRILING DATE: 2000-04-11
PRIOR PILING DATE: 2000-04-11
OUMBER OF SEQ ID NOS: 358
SOFTWARE: PASESEQ for Windows Version 3.0
SEQ ID NO 231
                                                                                                                                                                                    밁
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
문
                     र्
                                                          8
                                                                                       ঠ
                                                                                                                        밁
                                                                                                                                                ঠ
                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; LENGTH: 5540
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-979-159-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-979-159-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 231, Application (
Publication No. US200501421
GENERAL INFORMATION:
APPLICANT: Brad St. Croix
APPLICANT: Bert Vogelstei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Bert Vogelstein
APPLICANT: Kenneth Kinzler
TITLE OP INVENTION: ENPOTHELIAL CELL EXPRESSION PATTERNS
FILE REFERENCE: 1107.00134
                                                                                                                        585
                          161
                                                             645
                                                                                         141
                                                                                                                                                      121
                                                                                                                                                                                       525
                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                     465
                                                                                                                                                                                                                                                                                                                    405
                                                                                                                                                                                                                                                                                                                                                                                 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                285
705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               225
                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                                                                                                       GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla 100
                                                                                                                                                                                                                                                                                                                                                                               GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTTTGGACAAATCAGGAAGTGTGCCTGCACCGGAATGAAATCTATTACTTTGTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAGGGGGACGCAGGAGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
             LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 180
                                                                                                                                           LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                      ArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGlu
                                                                            SerArgAepLeuGlyAlaIleValTyrCysValGlyValLysAepPheAenGluThrGln
                                                                                                                       TTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAATAGG
                                                                                                                                                                                       SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAla
                                                                                                                                                                                                                                                     CGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/10979159
o. US20050142138A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.57e-184
1526.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-979-159-231 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                         160
                                                                                                                                                                                                                                                     524
                                                                                                                                                                                                                                                                                                                                                80
                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                        644
                                                                                                                                                                                       584
                                                                                                                                                                                                                                                                                                                    464
                                                                                                                                                                                                                                                                                                                                                                                 404
                                                                                                                                                                                                                                                                                                                                                                                                                                              344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             284
```

```
SEQ ID NO 5
LENGTH: 5540
TYPE: DNA
CRCANISM: Homo sapi
FEATURE:
NAME/KEY: CDS
LOCATION: (144)...(1
US-11-047-278-5
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 5, Application US/11047278
Publication No. US20050196407A1
GENERAL INFORMATION:
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/9/970,076
PRIOR PILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR PILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
                    ð
                                                       밁
                                                                                 Ś
                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 13
US-11-047-278-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                문
                                                                                                                                                                        US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                                                                                                                   Score:
                                                                                                                                                                                                                                                                                 Pred. No.:
                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1005
345
                                                         285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   765
                           41
                                                                                      21
                                                                                                                                            1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACC
                GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                         ATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAA
                                                                       IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                                                                   CAAGGGGGACGCAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                                                                   GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTTCTGTCATCATCACCACACACACTGTTCTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerSerValllelleThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABRG1uLyBProPheSerValG1uAspThrTyrLeuLeuCyBProAlaProIleLeuLyB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProSerThrIleCyBAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuGlnG1yI1eI1eHisSerI1eLeuLysLysSerCysI1eGluI1eLeuAlaAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                     5.57e-184
1526.00
100.00%
100.00%
100.00%
100.00%
                                                                                                                                                                           ×
                                                                                                                                                                           US-11-047-278-5
                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                       5540
293
0
0
                                                                                                                                                                           (1-5540)
   40
                                                          344
                                                                                    40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1004
                           60
                                                                                                                   284
                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               944
```

```
Sequence 23, Application US/10038307
Publication No. US20030134786A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: LUGATH O'KEEFE
APPLICANT: LUGATH O'KEEFE
APPLICANT: LUGATH O'KEEFE
COURLENT APPLICANT: 7853-293
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION UMMBER: US/10/038,307
CURRENT APPLICATION UMMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 23
LENGTH: 1056
                                                                                                                                                                                                                              RESULT 14
US-10-038-307-23
US-10-038-307-23
; Sequence 23, App.
; Publication No.
; GENERAL INFORMA
APPLICANT: Th
APPLICANT: Th
APPLICANT: En
APPLICANT: En
APPLICANT: EN
APPLICANT: Th
APPLICANT: US
APPLICANT: Th
APPLICANT: Th
APPLICANT: Th
APPLICANT: TH
APPLICANT: TH
APPLICANT: TH
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT: THE
APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
 Alignment Scores:
Pred. No.:
Score:
                                                                       ; TYPE: DNA
; ORGANISM: Homo
US-10-038-307-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProSerThrI1eCy8AlaGlyGluSerPheGlnValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerGluGlnI1eTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValI1eI1eAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTTCTGTCATCATCACCACACACACTGTTCTGACGGT 1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerSerVallleIleThrThrThrHisCysSerAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTTATCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HisalaargasnValaspargValLeuCysSerPheLysIleAsnaspSerValThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGGAGGCTAATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                          sapiens
 1.39e-183
1514.00
 Length:
Matches:
                                                                                                                                                                                                                                                        Compositions
   1056
291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             293
                                                                                                                                                                                                                                                        and
                                                                                                                                                                                                                                                          Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 764
RESULT 15
US-10-201-292-23
US-10-201-292-23
US-10-201-292
Sequence 23, Application US/10201292
Publication No. US20030144193A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                        S
                                                                                                                                                                                                    밁
                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  154
                                                                                                                                                                                                    874
                                                                                                                                                                                                                                         261
                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                     221
                                                                                                                                                                                                                                                                                                                                                                                                                         694
                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     274
                                                                                                                                                                281
                                                                                                                                                                                                                                                                                                                                                 754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94
                                                                                                                            SerSerValllelleThrThrHisCysSer 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                                                                                                                                                                                                                                                                                                                        HisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGlu
                                                                                                                                                                                                                        GluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer
                                                                                                                                                                                                                                                                                                                                                     CATGCCCGCAACGTGGACAGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGTCAAGGCCTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAGGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                                                                                                                                     GAAGTTGGCATGAAAGCTGCACTCCAGGTCAGCATGAACGATGGCCTCTCTTTATCTCC
                                                                                                                                                                                                                                                                             AATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTAAAA
                                                                                                                                                                                                                                                                                              AsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys
                                                                                                                                                                                                                                                                                                                                                                                                                           CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                             ProSerThrI1eCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.00%
100.00%
99.21%
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              x US-10-038-307-23 (1-1056)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            153
                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                               873
                                                                                                                                                                                                                                                                                                                                                     813
                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                           753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                 260
```

```
APPLICANT: Theresa L. O NALLEY
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 C
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 23
LENGTH: 1056
TYPE: DNA
ORGANISM: Homo sapiens
US-10-201-292-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                  á
                                                                                                                                                                                                            음 중
                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                            ક
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2_COPY_28_320 (1-293) x US-10-201-292-23 (1-1056)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
Pred. No.:
  밁
                S
                                     음 중
                                                                          밁
                                                                                               ঠ
                                                                                                                         밁
                                                                                                                                        ર્
                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                   394
                                                                                                                                                                                                            454
                                                                                                                                                                                                                             121
                                                                                                     181
                                                                                                                          574
                                                                                                                                            161
                                                                                                                                                                  514
                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                              334
                                                                                                                                                                                                                                                                                                                                       274
                                                                                                                                                                                                                                                                                                                                                                                                                         154
  754
                    221
                                         694
                                                             201
                                                                                634
                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                214
                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                           19
                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -
                                                                                                                                                                                                                                                                                              GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla 100
                                                                                                                                                                                                                                                                                                                                       GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                        LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                    SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAla 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAGGGGGACGCAGGGATGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
HisalaargAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu 240
                                         ProSerThrIleCybAlaGlyGluSerPheGlnValValArgGlyAsnGlyPheArg
                                                                                            LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu
                                                                                                                         CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                       LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 180
                                                                                                                                                                 SerargaspLeuGlyalaIleValTyrCysValGlyValLysaspPheAsnGluThrGln 160
                                                                                                                                                                                                                                                                                                                                                                                 CAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACC
                                                                                   CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.39e-183
1514.00
100.00%
100.00%
100.00%
99.21%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Compositions and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1056
291
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Methods
                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                          633
                                                                                                                                                                                                                                                                                                                                       333
                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                         213
                                                                                                                                                                                                                                                                                                                                                                                                                                             40
                                         753
                                                             220
                                                                                 693
                                                                                                                                                                                                             513
                                                                                                                                                                                                                                                                                                                                                                                 273
```

```
á
밁
      δ
               밁
                                     문
                                            ð
934
         281
                   874
                            261
                                      814
                                               241
SerSerValllelleThrThrThrHisCysSer
                  AsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys
966
         291
                            280
                                      873
```

Search completed: December 19, 2005, 02:10:15 Job time : 959.696 secs



```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Run
                                                                                                                                                                                                          Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -Q=/Cgp2 1 (USPPO gpool/US09970076/runat 14122005 111853 21065/app query.fasta 1.2410
-Q=/Cgp2 1 (USPPO gpool/US09970076/runat 14122005 111853 21065/app query.fasta 1.2410
-DB=Published_Applications_NA_New -QFMT=fastap -SUFFIX=Tnpbn -MINMATCH=0.1
-LOODEXT=0 -UNITS=blis -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR_MX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSTZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US09970076 @CGN 1 1 675 @TUNAT 14122005 111853 21065
-NCPU=6 -CTPU=3 -NO_MMAP -LARGEQUERTY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV_TIMEOUT=30 -MARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB seq length: Maximum DB seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM protein - nucleic search, using frame_plus_p2n model
                                          O
                                                                                O
                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
      1526
145.5
131
122
113.5
113.5
113.5
                                                                                                                                                                                    Score
                                                                                                                                                                                                                                                                                                                                                                     Published_Applications_NA_New:*

1: /cgn2_6/ptodata/1/pubpna/US09

2: /cgn2_6/ptodata/1/pubpna/US07

3: /cgn2_6/ptodata/1/pubpna/US07

4: /cgn2_6/ptodata/1/pubpna/US07

4: /cgn2_6/ptodata/1/pubpna/US10

6: /cgn2_6/ptodata/1/pubpna/US11

7: /cgn2_6/ptodata/1/pubpna/US11

8: /cgn2_6/ptodata/1/pubpna/US11

9: /cgn2_6/ptodata/1/pubpna/US11

9: /cgn2_6/ptodata/1/pubpna/US11

10: /cgn2_6/ptodata/1/pubpna/US11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        p2n.model -DEV-xlh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
      100.0
9.5
8.6
8.0
7.4
7.4
7.3
                                                                                                                                                                                    Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-2_COPY_28_320
1526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            December 18, 2005, 07:41:36; Search time 236.436 Seconds (without alignments)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4161431 seqs,
                                                                                                                                                                                                                                                                                                                                                                 /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
/cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
/cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OGGRREDGGPACYGGFDLYF.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Copyright
                                                                                                                                                                                    Length
    5540
4740
11447
2834
1325
2501
3449
3564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                    DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         245089505 residues
US-11-186-284-198

US-11-080-026-3

US-11-186-284-25

US-10-750-185-39040

US-10-750-185-56394

US-10-750-185-26394

US-10-131-2864-293

US-10-601-368-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       607.449 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DGLSFISSSVIITTHCSDG
Sequence 198, App
Sequence 3, Appli
Sequence 25, Appli
Sequence 39040, A
Sequence 56394, A
Sequence 182, App
Sequence 293, App
Sequence 20, Appl
                                                                                                                                                                                    Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1
US-11-186-284-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \frac{1}{2}
```

```
111
107.5
107.5
107.5
107.5
107
107
107
107
103.5
101.5
     75.5
75
74.5
                                                                                                                                                                                                                                                                                                                                                     79.5
79.5
79.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         91.5
84.5
                                                              77.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18
                                                              2765
3864
47572
2773
3874
1062
11347
1348
11052
13189
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115
11115

US-10-601-368-19
US-10-995-561-464
US-10-995-561-465
US-10-995-561-466
US-10-995-561-466
US-10-601-368-2
US-11-000-463-102
US-10-601-368-1
US-10-995-561-13356
US-10-995-561-13356
US-10-995-561-13356
US-10-601-368-1
US-10-601-368-1
US-10-601-368-1
US-10-601-368-1
US-10-601-368-1
US-10-507-275-4
US-10-507-275-4
US-10-513-786-6
US-10-513-786-6
US-10-513-786-6
US-10-793-626-4357
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-467-657-3291
US-10-629-8268-9
US-10-829-8268-9
US-10-829-8268-9
US-10-829-8268-9
US-10-523-17-4369
US-10-523-17-4369
US-10-523-17-4369
US-10-523-17-4369
US-10-523-17-4369
US-10-523-17-4369
US-10-523-17-4369
US-10-523-17-4369
US-10-523-17-4369
US-10-523-3648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
Sequence
Sequence
                                                           Sequence
Sequence
Sequence
                                                                                                                                               Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                 Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                   Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                Sequence
                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                              1464, Appl
465, App
266, Appl
274, Appl
102, Appl
103, Appl
103, Appl
103, Appl
103, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
10, Appl
10, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
12, Appl
13, Appl
13, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15, Appl
15,
     178, App
91, Appl
89, Appl
90, Appl
7037, Ap
4369, Ap
1, Appli
3648, Ap
```

## ALIGNMENTS

```
Sequence 198, Application US/11186284
Publication No. US20050266493A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Berger, Allison
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION,
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION,
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPM01-029P2RNM
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT APPLICATION NUMBER: US/10/301,822
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/381,978
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PR
```

ORGANISM:

Homo

Sapiens

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; LOCATION: (144)
US-11-186-284-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                           S
                                                                       밁
                                                                                           8
                                                                                                                    밁
                                                                                                                                           S
                                                                                                                                                                      밁
                                                                                                                                                                                          S
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: CDS
LOCATION: (144
                        1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            345
                                              261
                                                                        945
                                                                                               241
                                                                                                                        885
                                                                                                                                               221
                                                                                                                                                                        825
                                                                                                                                                                                               201
                                                                                                                                                                                                                         765
                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                          705
                                                                                                                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                          645
                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                        585
                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                           525
                                                                                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           225
281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 IleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyrTyrPheValGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GlnGlyGlyArgArgGluAspGlyGlyProAlaCysTyrGlyGlyPheAspLeuTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                                                                                                                                                                                                                                                                         LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla
                                                                                                                                                                                                                                                                                                                                       SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                        LeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThr
                                                                                                                                      HisAlaArgAsnValAspArgValLeuCysSerPheLysIleAsnAspSerValThrLeu
                                                                                                                                                                                                                                        LeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIleGluIleLeuAlaAlaGlu
                                                                                                                                                                                                                                                                         CTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGACGGCTTTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                        SerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAATCCGTCAAGGCCTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAGGGGGACGCAGGATGGGGGGTCCAGCCTGCTACGGCGGATTTGACCTGTACTTC
SerSerVallleIleThrThrThrHisCysSerAspGly 293
                                      GluValGlyMetLysAlaAlaLeuGlnValSerMetAsnAspGlyLeuSerPheIleSer
                                                                                       AsnGluLysProPheSerValGluAspThrTyrLeuLeuCysProAlaProIleLeuLys
                                                                                                                         CATGCCCGCAACGTGGACAGGGTCCTCTGCAGCTTCAAGATCAATGACTCGGTCACACTC
                                                                                                                                                                          CCATCCACCATATGTGCAGGAGAGTCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGA
                                                                                                                                                                                        ProSerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArg
                                                                                                                                                                                                                         CTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                        TCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTCAATGAGACACAG
                                                                                                                                                                                                                                                                                                                                                                           AATGAGAAGCCCTTTTCTGTGGAAGATACTTATTTACTGTGTCCAGCGCCTATCTTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.8e-179
1526.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-11-186-284-198 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5540
293
0
                        1064
                                                                         1004
                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                  160
                                                                                                                                                                                                                                                                                                                                                                                                  140
                                                                                                                                                                                                                                                                                                                                                                                                                            584
                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             284
                                               280
                                                                                                260
                                                                                                                         944
                                                                                                                                                  240
                                                                                                                                                                          884
                                                                                                                                                                                                220
                                                                                                                                                                                                                         824
                                                                                                                                                                                                                                                 200
                                                                                                                                                                                                                                                                          764
                                                                                                                                                                                                                                                                                                                          704
                                                                                                                                                                                                                                                                                                                                                                           644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
```

```
APPLICANT: LU, Chaér
TITLE OF INVENTION: MODIFIED POLYPEPTIDES ST.
TITLE OF INVENTION: DESIRED CONFORMATION AN
FILE REFERENCE: CPBF-P02-021
CURRENT APPLICATION NUMBER: US/11/080,026
CURRENT FILING DATE: 2005-03-15
PRIOR APPLICATION NUMBER: 09/945,265
PRIOR APPLICATION NUMBER: US 60/229,700
PRIOR FILING DATE: 2001-08-31
PRIOR APPLICATION NUMBER: US 60/229,700
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FASUSEQ for Windows Version 4.0
SOFTWARE: FASUSEQ for Windows Version 4.0
IENGTH: 4740
TYPE: DNA
ORGANISM: HOMO SAPIENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-11-080-026-3; Sequence 3, A)
                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2_COPY_28_320 (1-293) x US-11-080-026-3 (1-4740)
                     δ
                                                               밁
                                                                                                    S
                                                                                                                                       밁
                                                                                                                                                                5
                                                                                                                                                                                                     닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score:
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-11-080-026-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3, Application US/11080026
publication No. US:0050260192A1
GENERAL INFORMATION:
APPLICANT: Springer, Timothy A.
APPLICANT: Shimaoka, Motomu
APPLICANT: Lu, Chafen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1065 AGTTCTGTCATCACCACCACACACTGTTCTGACGGT 1103
                                161 LeuAlaArg-----
                                                                                                                                                                         123
                                                                                                                                                                                                          784 CTGTTTAACATCACCAACGGAGCCCGAAAGAATGCCTTTAAGATCCTAGTTGTCATCACG
                                                                                                                                                                                                                                             104 IleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeuThr
                                                                                                                                                                                                                                                                                  730
                                                                                                                                                                                                                                                                                                                                                                                                                           625 ACCTTGTTCTCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    520 GACATTGCCTTCTTGATTGATGGCTCTGGTAGCATCATCCCACATGACTTTCGGCGGATG
                                                                                                                                                                                                                                                                                                               84 LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                        56 IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAsp----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36 TyrTyrpheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17
AAATCCCGCCAAGAGCTTAATACCATCGCATCCAAGCCGCCTCGTGATCACGTGTTCCAG
                                                                                                      SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                       AspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                  CAGCTGCTT-----GGGCGGACACACACGGCCACGGGCATCCGCAAAGTGGTACGAGAG
                                                                                                                                                                                                                                                                                                                                                     TTTACCTTCAAAGAGTTCCAGAACAACCCTAACCCAAGATCACTGGTGAAGCCAATAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGGAGTTTGTCTCAACT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspLeuTyrPheIleLeuAspLysSerGlySerValLeu---HisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                    ----ArgGluGlnIleArgGlnGlyLeuGluGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.15e-06
145.50
45.85%
26.20%
9.53%
                                                                     GGAGTCATTCGCTACGTCATTGGGGTGGGAGATGCCTTCCGCAGTGAG
                     -----IleAlaAspSer-----LysAspHisValPhePro 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----GTGATGGAGCAATTAAAAAAGTCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                           TTGATGCAGTACTCTGAAGAATTCCGGATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STABILIZED IN AND METHODS FO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4740
60
45
81
43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRODUCING SAME
                                                                                                         160
                                                                                                                                                                                                                843
                                                                                                                                                                                                                                                                                   783
                                                                                                                                                                                                                                                                                                                    103
                                                                                                                                                                                                                                                                                                                                                       729
                                                                                                                                                                                                                                                                                                                                                                                            83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ω
5
                                                                                                                                            903
                                                                                                                                                                             140
                                                                                                                                                                                                                                                  122
                                                                                                                                                                                                                                                                                                                                                                                                                                                             71
```

```
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: MCTHODS FOR IDENTIFICATIONS, KITS, ANI
TITLE OF INVENTION: MCTHODS FOR IDENTIFICATION, ASSESSY
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MCMO1-029P2RNM
CURRENT APPLICATION UNMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-03-05
PRIOR PELING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-05-20
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR PLING DATE: 2002-05-20
                                     ঠ
                                                                                   밁
                                                                                                                          र्
                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 3
US-11-186-284-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
    밁
                                                                                                                                                                    밁
                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_28_320 (1-293) x US-11-186-284-25 (1-11447)
                                                                                                                                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                                                                                                                                         Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-11-186-284-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 228
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 25, Application US/11186284 Publication No. US20050266493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Millennium Pharmaceuticals, APPLICANT: Berger, Allison APPLICANT: Guillemette, Tracy L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
NAME/KEY: CDS
LOCATION: (1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ENGTH: 11447
                                                                                                                                                                                                                                                                                                                                                                                                        8
0
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              194
                                           54
                                                                                                                                                                                                              17
                                                                                                                          TyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMet
                                                                                                                                                                  GATATTGTGTTTTTGGTTGATGGCTCCTATAGCATTGGGATTGCAAACTTTGTTAAAGTT 1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys 193
AGTCTTGTGCAATACAGCCGGGATCCTCATACTGAGTTCACTTTGAAAAAATTCACCAAA 149
                                       SerPheIleValPheSerThr------ArgGlyThrThrLeuMetLyaLeuThrGlu 70
                                                                                                                                                                                                         AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGTCTCAGGAAGGCTTCAGCGCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal 213
                                                                                 AGAGCCTTTTTGGAAGTTCTTGTAAAAAGTTTTGAAATTTCACCAAATAGGGTCCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ValArgGlyAsnGlyPheArgHisAla 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----ATCTTTGCGATCGAGGGTACTCAGACAGGAAGTAGCAGCTCCTTTGAGCATGAG 1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAATAAC---TTTGAGGCTCTGAAGACCATTCAGAACCAGCTTCGGGAGAAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (1) ... (9192)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kamatkar, Shubhangi
Schlegel, Robert
Monahan, John E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sapiene
                                                                                                                                                                                                                                                                                                   0.000288
131.00
48.99%
29.80%
8.58%
                                                                                                                                                                                                                                                                                                                   Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                          Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ASSESSMENT, PREVENTION,
                                                                                                                                                                                                                                                                                             11447
59
38
75
26
                                                                                 1437
                                                                                                                          53
                                                                                                                                                                                                              ω
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1065
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                         밁
                                                                               ঠ
                                                                                                                             밁
                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 4
US-10-750-185-39040/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                          US-09-970-076-2_COPY_28_320 (1-293) x US-10-750-185-39040 (1-2834)
                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 묽
                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-750-185-39040
                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 39040
LENGTH: 2834
TYPE: DNA
ORGANISM: Bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 39040, Application US/10750185 Publication No. US20050260603A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
FILE REFERENCE: MUNI100-2
CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR FILING DATE: 2002-12-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: MMI GENOMICS, INC. APPLICANT: DeNISE, Sue K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 64922
SOFTWARE: PatentIN version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                               Хо
::
                                           2061 GCGATGAAGGTGTTCATGAATGAGGTGATAAAGATGTTCCACGTTGGACCGGAC---ÄGÄ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1825 TCTTTTGAACTCACACAGTCTATCTGCCTTAGAATTGAGCAAGAATTGGCAGCT 1878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1768 CCTCCTGCAGAGACCCATGTGTTCACAGTGGAAGAT---TTTGATGCTTTTCAGAGGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  109 ArgGlnGlyTyrArgThr-----AlaSerValIleIleAlaLeuThrAspGlyGluLeu 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                127 HisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAla 146
                                                                                                                                                              17 AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu-----
53 MetSerPheIleVal-PheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspAr 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71
                                                                               ---IleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerProGlnLeuArg
                                                                                                                             GACATTTACTTCCTTATTGACGGGTCTGGCAGTACC-----CACCAAGACGACTTTCTC 2062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KERR, Richard
ROSENFELD, David
HOLM, Tom
BATES, Stephen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleHisSerIleLeuLysLysSerCysIleGluIle-----LeuAlaAla 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAATCTTTGCAGTTGGTGAAGGATGCCGTTCGCTCAGAATTGGAAGCTATTGCCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleValTyrCysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAsp 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCATCAGATGCTTTC-----AGAGATCCTGCGATAAAACTGAGGAATTCAGATGTT 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAG---GGATCAAGAAGCAATGTGCCAAAGGTCATGATTCTTATCACGGATGGGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGATCTACAAATACTGGCAAAGCAATGACTTATGTCAGAGAGAAAATATTTGTGCCTAGC 160:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTTGAAGATATAATT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----SerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIle 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuPro-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                19866880867914
                                                                                                                                                                                                                                                                     0.000453
122.00
50.00%
29.03%
7.99%
                                                                                                                                                                                                                                                                       Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ----GAAGCAATAAACACCTTCCCTTACAGAGGA
                                                                                                                                                                                                                                                      2834
39
71
24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1542
                                                                                   52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1656
                                           2005
                                                                                                                                                                       34
```

Mon

Dec

79

626 64

989

```
FILE REFERENCE: MMITION-2

CURRENT APPLICATION NUMBER: US/10/750,185

CURRENT FILING DATE: 2003-12-31

PRIOR APPLICATION NUMBER: US 60/437,482

PRIOR FILING DATE: 2002-12-31

NUMBER OF SEQ ID NOS: 64922

SOFTWARE: PatentIN version 3.1

SEQ ID NO 56394

LENGTH: 1325

TYPE: DNA

ORGANISM: Bovine 19866880505724

US-10-750-185-56394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                        S
                                                                 밁
                                                                                                      S
                                                                                                                                           US-09-970-076-2_COPY_28_320 (1-293) x US-10-750-185-56394 (1-1325)
                                                                                                                                                                                         Query Match:
DB:
                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-750-185-56394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 5
                                                                                                                                                                                                                                                                                                  Pred. No.:
                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: MMI GENOMICS, I APPLICANT: DENISE, Sue K. APPLICANT: KERR, Richard APPLICANT: ROSENFELD, Dav APPLICANT: HOLM, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 56394, Application US/10750185 Publication No. US20050260603A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: ROSENFELD, David
APPLICANT: HOLM, Tom
APPLICANT: BATES, Stephen
APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1775 CCCGGTG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1616 GGTACAAGACATCTGT 1601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1944 CACTCCAGTGTGGCAGGGCTTGGAGGTAGCCGTTGACAGCATCCAGCAG-----AAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         168 sAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             128 uAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleVa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                108 nArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGl
                        28
                                                                                                        ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ::: ||| || || |||||||||||| :::::: |||
Val---LeuHisHisTrpAsnGluIleTyrTyrPhe---ValGluGlnLeuAlaHisLys 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gGluGlnIleArgGlnGlyLeuGlu------GluLeuGlnLysValLeuProGl
                                                                 GGGAGCGCCTGTGAGAACAAGCGAGCGGACGTGGTCTTTATCATTGACAGCTCACGCAGC
                                                                                                      GlyProAlaCysTyrGly---GlyPheAspLeuTyrPheIleLeuAspLysSerGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      eLeuLysLysSerCys 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTATGCAGTTGGAGTCAGAGATGCTAATATTGCTGAGCTTCAAGAGATTGCTGAA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lTyrCysValGlyValLysAspPheAspGluThrGlnLeuAlaArgIleAlaAspSerLy 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCTCGCAGCAA-CGTGCCTT-GGTATCTCATTTGTTGTCACTGACGGCCAATCTATGGA 1776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 yGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAs 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -GACAGAATGTTTTCGTGCATGAT---TTTGAGTCCTTGAAGACCATCCAACAAGAAGT 1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGGGGCACCAAGATGGGTGAGGCCCTG---GGCAGCATGATCCAGGTCTTTGCAGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DeNISE, Sue K.
KERR, Richard
                                                                                                                                                                                            0.00163
113.50
42.63%
23.11%
7.44%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -GCTGATGCTGCAGAGGCGCTGAGGGGCCATGGAGTCACCAT 1728
                                                                                                                                                                                         Indels:
Gaps:
                                                                                                                                                                                                                                   Conservative: Mismatches:
                                                                                                                                                                                         1325
58
49
93
51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88
                                                                                                                                                                                                                          APPLICANT: Labat, Ivan
APPLICANT: Stache-Crain, Birgit
APPLICANT: Stache-Crain, Susan
APPLICANT: Tang, Y. Tom
TITLE OF INVENTION: Methods for Diagnosis and
FILE REFERENCE: 821A
CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT ETLING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US/0/462,047
PRIOR FILING DATE: 2003-04-07
PRIOR FILING DATE: 2003-04-07
NUMBER OF SEQ ID NOS: 1704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                           Alignment Scores: Pred. No.:
                                                                                                        ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-821-234-182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-821-234-182/c
    Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 182, Application US/10821234 Publication No. US20050255114A1 GENERAL INFORMATION:
                                                                                                                                                                                         SOFTWARE: pt_SEQ_genes Version
SEQ ID NO 182
                                                                                                                                                                      LENGTH: 2501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1143 GCAAAGGTCGAG-----ATAAGACACAGT 1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        212 ValValValArgGlyAsnGlyPheArgHisAla 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        966 CTGGTGGCCAAC---TTCAGCCAGATTGAGACGCTGACCTCAGTGTTCCAGAAGAAGTTG 1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   154 ---LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  115 AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100 AlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg------Thr 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                576 GACATTGGCCCTGACGTCACCCGTGTGGGTCTGCTCCAGTAT-----GGCAGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   516 GTCAACACCCACGACTACGCAAAGGTCAAGGAGTTCATTGTGGACATCCTGCAGTTCTTG 575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80 GluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArg 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCGAGGTGGCCGCAAAAGCCCGGGACACAGGCATCCTGATCTTTGCCATCGGTGTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGGTGGACTTCAACACGCTGAAGGCCATTGGGAGCCGAGCCCCACGAGGACCACGTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTCGGGTCATAATGATCGTGACTGATGGGAGGCCCCAGGACTCGGTG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---GCCCTGAACATCGCCTTCTCGGAAGCAGAGGGGGCCCCGGCCCCTGAGGGAGAATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCAAGAACGAGTTCTCCCTCAAGACCTTCAAGAGGAAGTCCGAGGTGGAGCGTGCCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Leu-----MetlysLeuThrGluAspArgGluGlnIleArgGlnGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PheIleSerProGlnLeu---ArgMetSerPheIleValPheSerThrArgGlyThrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProSerThrIle-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGAGGATGCGGCATCTGTCCACGGGCACCATGACGGGGCTGGCCATCCAGTAC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTCCCGGGTTCATTCTGTGCTACCTGGTCCCAAGTACTGTGCTGGCAAGGGGTCTTTA 1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCAGTAAGTCCTGCTCCTCTGTGGCTCTTCTCGGGGCATCGTTGGGATGAGGTCATTCA 1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cys------Glu
  0.00432
113.50
38.28%
    Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and
                                                                                                                                                                                                                                                                                                                                                                  Treatment
                                                                                                                                                                                                                                                                                                                                                                  of.
                                                                                                                                                                                                                                                                                                                                                                  Preeclampsia
```

200

965

905 153 845

```
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_28_320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1631 GAAGGAGTCGATGCTGAGGATGGGCACGGCCCAGGGGAACAACAGAAGCGGAAGATCGTC 1572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GlnGlyGlyArgArgGluAspGly---GlyProAla------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnGlyTyr---ArgThrAlaSerValIleIleAlaLeuThrAspGly----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAGGCTGGAACCGCACCCGCCATGTCATCATCATGACTGATGGATTGCACAACATG 1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATGGTGTGAAGCCA-----AGATATGGTCTAGTGACATATGCCACATACCCCAAAATT 1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCAGCAACTTCACAGGAGCCAAAAAGTGTCTAGTCAACTTAATTGAGAAGGTGGCAAGT 1452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGACCCTTCAGGCTCCATGAACATCTACCTGGTGCTAGATGGATCAGACAGCATTGGG
                                                                                                                                                                                                                                                                                                                                          ValArgGlyAsnGlyPheArgHisAlaArgAsnValAspArgValLeuCysSerPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACCAAGTGAACATCAATGCTTTGGCTTCCAAGAAAGACAATGAGCAACATGTGTTCAAA 996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArg------------------ 109
                                                AspGlyLeuSerPheIleSerSerValIleIleThrThrThrHisCys
                                                                                                                                           CysProAlaProIleLeuLysGluValGlyMetLysAlaAlaLeuGlnValSerMetAsn
                                                                                                                                                                                                                                              IleAsnAspSerValThrLeuAsnGluLysProPheSerValGluAspThrTyrLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                          IleGluIleLeuAlaAlaGluProSerThrIleCysAlaGlyGluSerPheGlnValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCAAGGAT---ATGGAMAACCTGGAAGATGTTTTCTACCAAATGATCGATGAAAGC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGCAAAAACCCCAAGGGAGGATTATCTGGATGTCTATGTGTTTTGGGGTCGGGCCTTTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGly-----Val
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCGGGGACCCAATTACTGTCATTGATGAGATCCGGGACTTGCTATACATTGGCAAGGAT 1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---AAGAAGGCCCTCCAGGCAGTGTACAGCATGATGAGCTGGCCAGATGACGTCCCTCCT 1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAATCAATTATGAAGACCACAAGTTGAAGTCAGGGACTAACACC------ 1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GluLeu-----GlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGGTCAAAGTGTCTGAAGCAGACAGCAGTAATGCAGACTGGGTCACGAAGCAGCTCAAT 1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuMetLyaLeuThrGlu------AspArgGluGlnIleArgGlnGlyLeuGlu 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysPheIleSerProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHis 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ----CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal---
                                                                                                                                                                                                                                                                                              -GGCATGGTTTGGGAACACAGGAAGGGTACCGAT-----
     -GCTGTGGTGTCTGAGTACTTTGTGCTGACAGCAGCACATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19
                                                                                                                                                                                              -----TACCACAAGCAACCATGGCAGGCCAAGATCTCAGTC-----
                                                                                                                                                                                                                                                                                                                                                                                               ------CAGTCTCTGAGTCTCTGT----------
                                                                                                   ATTCGCCCTTCAAAGGGACACGAGAGCTGTATGGGG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (1-293) x
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----GluLeuHisGluAspLeuPhePheTyrSerGlu 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-821-234-182 (1-2501)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 109
99
17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1512
                                                                                                   819
                                                                                                                                                                                                                                                                                              891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ľ
                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                                   Ş
                                                                                                밁
     밁
                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo US-10-131-826A-293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 7
US-10-131-826A-293
                                                                                                                                                                                           US-09-970-076-2_COPY_28_320 (1-293) x US-10-131-826A-293 (1-3449)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: P3330R1C128
CURRENT APPLICATION NUMBER: U9/10/131,826A
CURRENT APPLICATION NUMBER: 60/04991
PRIOR APPLICATION NUMBER: 60/04991
PRIOR PPLICATION NUMBER: 60/05974
PRIOR PPLICATION NUMBER: 60/05974
PRIOR PILING DATE: 1997-08-26
PRIOR PILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR APPLICATION NUMBER: 60/059113
PRIOR PILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059117
PRIOR PILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059127
PRIOR APPLICATION NUMBER: 60/059127
PRIOR APPLICATION NUMBER: 60/059127
PRIOR APPLICATION NUMBER: 60/059127
PRIOR APPLICATION NUMBER: 60/059127
PRIOR APPLICATION NUMBER: 60/059127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
Remaining Prior Application data ren
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 293
LENGTH: 3449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 293, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Baker, Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OR FILING DATE: 1997-09-17
OR APPLICATION NUMBER: 60/059122
OR FILING DATE: 1997-09-17
OR APPLICATION NUMBER: 60/059184
OR FILING DATE: 1997-09-17
OR APPLICATION NUMBER: 60/059263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/059352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION:
432 AAGGAGTTCATCGTGGACATCTTGCAATTCTTGGACATTGGTCCTGATGTCACCCGAGTG
                                                36 TyrTyrPhe---ValGluGlnLeuAlaHisLysPheIleSerProGlnLeu---ArgMet
                                                                                             GACCTGGTTTTCATCATCATGACAGCTCTCGCAGTGTCAACACCCCATGACTATGCAAAGGTC
                                                                                                                       AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gerritsen, Mary E.
Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Watanabe, Colin K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stewart, Timothy A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Beresini, Maureen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/10131826A
o. US20050245730A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sapien
                                                                                                                                                                                                                                                             0.00707
113.50
43.90%
22.36%
7.44%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           removed -
                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        See File Wrapper
                                                                                                                                                                                                                                         3449
55
53
103
35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PALM
     493
                                                53
                                                                                                431
                                                                                                                                           35
```

Ş

81

밁 ક 밁

1397

밁

1337

97

1292

1235

110

S 밁

1451

65

밁 ş

1571

밁 र्

र्

29

1511

8

234

990

254

밁 र् 밁 δ 밁

818

Ś

214

밁 5 밁 र् 밁 ई 밁 S 밁 ફ 밁 δ 밁 ફ

941 194 995 1115

136

1055

154

174

1175

밁

```
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND FILE REFERENCE: 07334-275001
CURRENT APPLICATION UMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/9/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 20
                                                        ; ORGANISM: Mus musculus
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(3564)
US-10-601-368-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 8
US-10-601-368-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20, Application US/10601368
Publication No. US20050260702A1
GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                LENGTH: 3564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              654 GCAGAGGGGCCCCGGGCCCCTGAGGGAGAATGTGCCACGGGTCATAATGATCGTGACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   144 LeuGlyAlaIleValTyrCysValGlyVal-----LysAspPheAsnGluThrGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              543 TTCAAGAGGAAGTCCGAGGTGGAGCGTGCTGTCAAGAGGATGCGGCATCTGTCCACGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGTGTGCCATGGAGGAC 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerThrIleCysAlaGlyGluSerPheGlnValValValArgGlyAsnGlyPheArgHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnGlyIleIleHisSerIleLeuLγεLγεCγεIleGluIleLeuAlaAlaGluPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAGACCTCAGGACTCCGTG------GCCGAGGTGGCTGCTAAGGCACGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgGlnGlyTyrArg------ThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCATGACTGGGCTGGCCATCCAGTAT------GCCCTGAACATCGCATTCTCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCCTGCTCCAATAT------GGCAGCACTGTCAAGAATGAGTTCTCCCTCAAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerValThrLeuAsnGlu 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCAAACAAGGCTACATTCTCAACTCGGATCAGACGACTTGC-----AGAATCCAGGAT 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AlaArg-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGCATAACTGTGCC-----CACTTCTGCATCAACATCCCTGGCTCATACGTCTGCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGACGCTGACCTCCGTGTTCCAGAAGAAGTTGTGCACGGCCCACATGTGCAGCACCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTGGGAGTGAGCCCCATGAGGACCATGTCTTCCTTGTGGCCAAT---TTCAGCCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACGGGCATCCTAATCTTTGCCATTGGTGTGGGCCAGGTAGACTTCAACACCTTGAAGTCC
  0.0153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -AsnValAspArgValLeuCysSerPheLysIleAsnAsp
Length:
                                                                                                                                                                                                                                                                                                                                                                                                        AND USES THEREOF
    3564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                            US-10-601-368-19; Sequence 19, Application US/10601368; Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                      SEQ ID NO 19
LENGTH: 4858
TYPE: DNA
                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jo
                                                                                                 PRIOR APPLICATION NUMBER: US/09/561,263A PRIOR FILING DATE: 2000-04-27 PRIOR APPLICATION NUMBER: US 09/322,790 PRIOR FILING DATE: 1999-05-28 NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
                                                                                                                                                                                                                                          APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
                                                                                SOFTWARE: FastSEQ for Windows Version
  ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1054 TTGGAAGGC 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1003 GAGGCGGCCCTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            592 CAGATCCAGGTCGGAATAGTCCAGTATGGAGAAGATGCCGTCCATGAGTTCCACCTT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 LeuGlnGly 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              145 GlyAlaIleValTyrCysValGlyValLysAsp-----pheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        127 HisGluAsp------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              709 GGGACAGAGACCCGCACGGCATTTGGCATTGAATTTGCACGCTCGGAGGCTTTCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             50 GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90 AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATGAAATCAAATACATCGCCAGCGACCCTGACGACAAGCACTTCTTCAACGTCACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACGCTGTGGCCGTTTTGGGCTACTACAACCGCAGGGGGGATCAATCCAGAGACTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGGTGGAGGTCCAACACTTCCTCATCAATATCCTCAAAAAGTTCTACATTGGCCCCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCCAGACTTACATGGACATCGTCATTGTCTTAGATGGCTCCAACAGCATC---TACCCC 531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           СуяТуrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACGACAGCCCAGACCTGGAGAAGGTGATCCGGCAGAGCGAGAAGGACAACGTGACCAGA 882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGGAAGAAAAGGGGCCAAG-----AAAGTGATGATTGTCATCACGGACGGGAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ------LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          111.00
37.93%
24.14%
7.27%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGGACATTGTTGATGCCCTTGGGGACAGGATCTTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  x US-10-601-368-20 (1-3564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9 8 8 8 9
```

1002

160 942 144

126

822

129

106

708 89 648 69

768

591 49

```
| Sequence 464, Application US/10995561 | Publication No. US20050272054A1 | GENERAL INFORMATION: US20050272054A1 | GENERAL INFORMATION: Michele et al. APPLICANT: CARGILL, Michele et al. TITLE OF INVENTION: GENERIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONTITLE OF INVENTION: DETECTION AND USES THEREOF FILE REFERENCE: CL001559 | CURRENT APPLICATION NUMBER: US/10/995,561 | CURRENT FILING DATE: 2004-11-24 | NUMBER OF SEQ ID NOS: 85702 | SOFTWARE: FABSUSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Si
Query Match:
DB:
                                                                                                                                                                                            RESULT 10
US-10-995-561-464
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; FEATURE: ; NAME/KEY: CDS; LOCATION: (28)...
                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                       1030
                                                                                                                                                                                                                                           1081
                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                  145
                                                                                                                                                                                                                                                                                                                                                                                                                                                              130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           127
                                                                                                                                                                                                                                                                                                                                                                   970
                                                                                                                                                                                                                                                                                                                                                                                                                                 910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12
                                                                                                                                                                                                                                                                                                                              LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 180
                                                                                                                                                                                                                                        TTGGAAGGC 1089
                                                                                                                                                                                                                                                                       LeuGlnGly 183
                                                                                                                                                                                                                                                                                                       GAGGCGGCCCTG-
                                                                                                                                                                                                                                                                                                                                                                                               GlyAlaIlevalTyrCysValGlyValLysAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTGGAAGAAAAGGGGCCAAG-----AAAGTGATGATTGTCATCACGGACGGGGAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGACAGAGACCCGCACGGCATTTGGCATTGAATTTGCACGCTCGGAGGCTTTCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                                                                                                                                                                AATGAAATACATCGCCAGCGACCCTGACGACAAGCACTTCTTCAACGTCACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                TACGCTGTGGCCGTTTTGGGCTACTACAACCGCAGGGGGATCAATCCAGAGACTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACGACAGCCCAGACCTGGAGAAGGTGATCCGGCAGAGCGAGAAGGACAACGTGACCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HisGluAsp----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGATCCAGGTCGGAATAGTCCAGTATGGAGAAGATGCCGTCCATGAGTTCCACCTT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGGTGGAGGTCCAACACTTCCTCATCAATATCCTCAAAAAGTTCTACATTGGCCCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCCAGACTTACATGGACATCGTCATTGTCTTAGATGGCTCCAACAGCATC---TACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ------LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (3591)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.0245
111.00
37.93%
24.14%
7.27%
                                                                                                                                                                                                                                                                                                      AAGGACATTGTTGATGCCCTTGGGGACAGGATCTTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-601-368-19 (1-4858)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                               -----PheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   44858
449
888
9
                                                                                               RESPONSE,
                                                                                                 METHODS
                                                                                                                                                                                                                                                                                                                                                                  1029
                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   106
                                                                                                                                                                                                                                                                                                                                                                                                                                969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            618
                                                                                                                                          RESULT 11
US-10-995-561-465
; Sequence 465, App
; Publication No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: DNA
; ORGANISM: Hom
US-10-995-561-464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WI
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CLOO11559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
NUMBER OF SEQ ID NOS: 85702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO
LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŏ
                                                                                                                                                                                                                                                       190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        537
                                                                                                                                                                                                                         819
                                                                                                                                                                                                                                                                                                                   173
                                                                                                                                                                                                                                                                                                                                                  711
                                                                                                                                                                                                                                                                                                                                                                                155
                                                                                                                                                                                                                                                                                                                                                                                                                 651
                                                                                                                                                                                                                                                                                                                                                                                                                                             144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     483
                                                                                                                                                                                                                                                                                     759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18 LeuTyrPheIleLeuAspLysSerGlySerVal----------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          464
3175
                                                                                                                                                                                                                         AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuGlyAlaIleValTyrCysVal------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGTACTTCGTGCTGGACACCTCGGAGAGCGTCACCATGCAGTCCCCCACGGACATCCTG
                                                                                                                                                                                                                                                                                     ATGCTGCCYGÁCTCCACCGAGATCRACCAGGACACCATCAACCGCATCATCAAGGTCATG
                                                                                                                                                                                                                                                                                                               ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu---
                                                                                                                                                                                                                                                                                                                                                                               AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                               GAGGGCATCCGGCCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCCACGTCACCGGCAGCCCCTGCGGGGGCATCAAGCTGCAGGCCGAGCGGGCCCGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGACCAGGTGGCGTGAGCTGGCGCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                GACATCGCCAGCACGCCCCACGAGCTCTACCGC-----AACGACTACGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ÁTCCGGCAGGACCGCAGCAAGGGC-----ÀCCGTCCACTTCGCCGTGGTCATCACCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerProGlnLeuArgMetSerPhe-----IleValPheSerThrArgGlyThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/10995561
b. US20050272054A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.035
107.50
40.28%
23.15%
7.04%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----ÀCCTTCACCGACTGCGCGCTGGCCAACATGACGGÁGCÁG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    x US-10-995-561-464 (1-3175)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                              LysLysSerCysIleGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3175
50
37
84
45
                                                                               RESPONSE,
```

172

189

154

650 143 590 123 536

710

103 482 83

63

47

28

METHODS

õ

```
Best Local
Query Match
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA
; ORGANISM: Homo
US-10-995-561-465
                                                                                                                          RESULT 12
US-10-995-561-466
                                                                                                                                                                                 ð
                                                                                                                                                                                                            В
                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                               밁
Sequence 466, Application US/1099561

Sequence 466, Application US/1099561

Publication No. US20050272054A1

GENERAL INFORMATION:

APPLICANT: CARGILL, Michele et al.

TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH

TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RES

TITLE OF INVENTION: DETECTION AND USES THEREOF

FILE REPERENCE: CL001559

CURRENT APPLICATION NUMBER: US/10/995,561

CURRENT FILING DATE: 2004-11-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: FASTSEQ
SEQ ID NO 465
LENGTH: 3464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity:
Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Мо
::
                                                                                                                                                                                                                                                                                       155
                                                                                                                                                                                                                                                                                                                 651
                                                                                                                                                                                                                                                                                                                                        144
                                                                                                                                                                                                                                                                                                                                                                591
                                                                                                                                                                                                                                                                                                                                                                                                              537
                                                                                                                                                                                                                                                                                                                                                                                                                                       104
                                                                                                                                                                                                                                                                                                                                                                                                                                                               483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               243
                                                                                                                                                                                        190
                                                                                                                                                                                                                                                                711
                                                                                                                                                                                                                                                                                                                                                                                       124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                423
                                                                                                                                                                819
                                                                                                                                                                                                               759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGACCAGGTGAGCTGAGCTGAGGCGACTGCTCTCTGACCAGGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GIGTACTICGIGCIGGACACCICGGAGAGCGICACCATGCAGICCCCCACGGACATCCIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuTyrPheIleLeuAspLysSerGlySerVal------
                                                                                                                                                                AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAAATC
                                                                                                                                                                                                                                                                                                                 GAGGGCATCCGGCTCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                        LeuGlyAlaIleValTyrCysVal------
                                                                                                                                                                                                                                                                                                                                                                                         GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCTTCCGCCGCGC-----ACCTTCACCGACTGCGCGCTGGCCAACATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerProGlnLeuArgMetSerPhe------IleValPheSerThrArgGlyThr
                                                                                                                                                                                                               ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATCAAGGTCATG
                                                                                                                                                                                                                                      ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu-----
                                                                                                                                                                                                                                                                GACATCGCCAGCACGCCGCACGAGCTCTACCGC--
                                                                                                                                                                                                                                                                                     AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                GGCCACGTCACCGGCAGCCCCTGCGGGGGCATCAAGCTGCAGGCCGAGCCGGGCCCGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCGGCAGGACCGCAGCAAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.04
107.50
40.28%
23.15%
7.04%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-995-561-465 (1-3464)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                 4.0
                                                                                                                                                                                      -LysLysSerCysIleGluIle 196
                                                                                                                                                                                                                                                                 -----AACGACTACGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3464
50
37
84
45
                                                    RESPONSE,
                                                                                                                                                                866
                                                                                                                                                                                                                                                                                                                                         GlyValLys
                                                       METHODS
                                                                                                                                                                                                                                                                                                                                          154
                                                                                                                                                                                                                                                                                                                                                                                         143
                                                                                                                                                                                                                                                                                                                                                                                                                                           123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 422
                                                                                                                                                                                                                   818
                                                                                                                                                                                                                                           189
                                                                                                                                                                                                                                                                                           172
                                                                                                                                                                                                                                                                                                                 710
                                                                                                                                                                                                                                                                                                                                                                   650
                                                                                                                                                                                                                                                                                                                                                                                                                  590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  302
                                                       읶
   Sequence 2, Application US/10601368

Publication No. US20050260702A1

GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUI
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred.
                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_28_320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                  RESULT 13
US-10-601-368-2
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                     닭
                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-995-561-466
                                                                                                                                                      밁
                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        303
                                                                                                                                                                                                                                                                                                                                                                                                        537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       243
                                                                                                                                                       819
                                                                                                                                                                                                       759
                                                                                                                                                                                                                                                                                                                                                        591
                                                                                                                                                                                                                                                                                                                                                                                124
                                                                                                                                                                                                                                                                                                                                                                                                                               104
                                                                                                                                                                                                                                                                                                                                                                                                                                                        483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.0401
107.50
40.28%
23.15%
7.04%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (1-293)
```

```
NUMBER OF SEQ ID NOS: 85702
SOPTWARE: FastSEQ for Windows Version
SEQ ID NO 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                  144 LeuGlyAlaIleValTyrCysVal------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuTyrPhelleLeuAspLysSerGlySerVal----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerProGlnLeuArgMetSerPhe------IleValPheSerThrArgGlyThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGTACTTCGTGCTGGACACCTCGGAGAGCGTCACCATGCAGTCCCCCACGGACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGTTCAGCCCACCGGGCAGCGÁCCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACCAGGTGGCGCTGAGCTGGCGCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAAATC
                                                                                                                                                                                                                                                                                          ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu-----
                                                                                                                                                                                                                                                                                                                                                                    AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                               GAGGGCATCCGGCTCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCCACGTCACCGGCAGCCCTGCGGGGGGCATCAAGCTGCAGGCCGAGCCGAGCCGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCCGGCAGGACCGCAGCAAGGGC-----ACCGTCCACTTCGCCGTGGTCATCACCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCTTCCGCCGCGGC-----ÀCCTTCACCGACTGCGCGCTGGCCAACATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluLeuGln
                                                                                                                                                                                                                                                     ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATCAAGGTCATG
                                                                                                                                                                                                                                                                                                                                   GACATCGCCAGCACGCCCCACGAGCTCTACCGC-----AACGACTACGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 x US-10-995-561-466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.0
                                                                                                                                                                                                          LysLysSerCysIleGluIle
SUBUNIT
  ¥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3468
50
37
84
45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (1-3468)
  SES
  THEREOF
                                                                                                                                                                              966
                                                                                                                                                                                                                                                                                                                                                                                                                                                        -GlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302
                                                                                                                                                                                                                                                                                                                                     758
                                                                                                                                                                                                                                                                                                                                                                                172
                                                                                                                                                                                                                                                                                                                                                                                                                                                          154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28
                                                                                                                                                                                                                                                           818
                                                                                                                                                                                                                                                                                                189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             590
```

```
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(;
US-10-601-368-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
RESULT 14
US-11-000-463-574
; Sequence 574, Application US/11000463
; Publication No. US20050266423A1
                                                                                           유
                                                                                                                        ঠ
                                                                                                                                                           밁
                                                                                                                                                                                          ş
                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2_COPY_28_320 (1-293)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR PILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 3564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NO:
                                                                                                                                                               1003
                                                                                                                            181
                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                                                                            823
                                                                                                                                                                                                                                                                                                                                                                                                               127
                                                                                                                                                                                                                                                                                                                                                                                                                                               769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                            LeuGlnGly 183
                                                                                                                                                               GAGGCTGCCTTG---
                                                                                                                                                                                                                                                              GlyAlailevalTyrCysValGlyValLysAsp------PheAsnGluThrGln
                                                                                                                                                                                                                                                                                                   TATGCGGTGGCCGTCCTGGGCTACTACAACCGCAGGGGGGATCAATCCAGAAACTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                         HisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGGTGGAGGTTCAGCACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCCAGACCTACATGGACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCC
                                                                                           CTGGAAGGC
                                                                                                                                                                                          LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 180
                                                                                                                                                                                                                                 AATGAAATCAAATACATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGAT
                                                                                                                                                                                                                                                                                                                                                                          CACGACAGCCCAGACCTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTGGAAGGAAAGGAGCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeu 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAACAGAGACCCGGACGGCATTTGGCATTGAATTTTGCACGCTCAGAGGCTTTTCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGATCCAGGTTGGAGTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
                                                                                                                                                                                                                                                                                                                                       -----LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (3564)
                                                                                           1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.0483
107.00
37.93%
24.14%
7.01%
                                                                                                                                                               AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          x US-10-601-368-2 (1-3564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28
38
9
                                                                                                                                                               1053
                                                                                                                                                                                                                                                                                                                                         144
                                                                                                                                                                                                                                                                                                                                                                                                                                               822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  591
                                                                                                                                                                                                                                                                                                      942
                                                                                                                                                                                                                                                                                                                                                                            882
                                                                                                                                                                                                                                                                                                                                                                                                             129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Drmanac, Radoje T.
ITILE OF INVENTION: Novel Nucleic Acids and Polypeptides
FILE REFERENCE: 785CIP4CN
CURRENT APPLICATION UNMBER: US/11/000,463
CURRENT FILING DATE: 2004-11-29
PRIOR APPLICATION NUMBER: 10/291,265
PRIOR FILING DATE: 2002-11-08
PRIOR FILING DATE: 2002-10-08
PRIOR PILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: PCT/US01/02623
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/921,404
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR APPLICATION NUMBER: 09/491,746
PRIOR APPLICATION NUMBER: 09/491,746
                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                      문
                                                                   δ
                                                                                                          문
                                                                                                                                   5
                                                                                                                                                                             片
                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                   よ
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2_COPY_28_320 (1-293) x US-11-000-463-574 (1-3967)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo US-11-000-463-574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: FastSEQ for Windows Version SEQ ID NO 574 LENGTH: 3967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2000-07-17
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
     127
                                                                                                                                                                               869
                                                                                                                                                                                                                                                     641
                                                                                                                                                                                                                                                                                                                         581
                                                                                                                                                                                                                                                                                                                                                                                            524
                                                                                                                                            90
                                                                                                                                                                                                                  70
                                                                                                                                                                                                                                                                                    50
                                                                                                                                                                                                                                                                                                                                                                                                                             12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tang, x 10...
Liu, Chenghua
       HisGluAsp----
                                                                                                                                                                             CAGATCCAGGTTGGAGTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---
                                                                                                                                                                                                                                                                                    GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                                                                                                                                                                                                       TGGGTGGAGGTTCAGCACTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGG
                                                                                                                                                                                                                                                                                                                                              TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                                                                                                                                                                                            TGCCAGACCTACATGGACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                           CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis 31
                                        GGTGGAAGGAAAGGAGCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCC
                                                                       GluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeu
                                                                                                          GGAACAGAGACCCGGACGGCATTTGGCATTGAATTTGCACGCTCAGAGGCTTTCCAGAAG
                                                                                                                                           AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr
                                                                                                                                                                                                              GluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qian, Xiaonon
Wang, Zhiwei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wehrman, To
Zhang, Jie
Zhou, Ping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zhou, Ping
Cao, Yi-Cheng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Asundi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Xiaohong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.0569
107.00
37.93%
24.14%
7.01%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
```

र्

871 126 817 69

697

49

640

68

757

```
APPLICANT: Weilindl, Ion
APPLICANT: Zhou, Ping
APPLICANT: Zhou, Ping
APPLICANT: Cao, Yi-Cheng
APPLICANT: Cao, Yi-Cheng
APPLICANT: Cao, Yi-Cheng
APPLICANT: Cao, Yi-Cheng
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides
FILE REFERENCE: 785CIPACN
CURRENT APPLICATION NUMBER: US/11/000,463
CURRENT FILING DATE: 2004-11-29
PRIOR APPLICATION NUMBER: 10/291,265
PRIOR FILING DATE: 2002-11-08
PRIOR APPLICATION NUMBER: PCT/US01/02623
PRIOR APPLICATION NUMBER: PCT/US01/02623
PRIOR FILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR FILING DATE: 2000-09-15
NUMBER OF SEQ ID NOS: 944
SOPTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 102
LENGTH: 3969
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
US-11-000-463-102
; Sequence 102, App
; Publication No. I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                           Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                           ; NAME/KEY: CDS
; LOCATION: (52)..(3618)
US-11-000-463-102
US-09-970-076-2_COPY_28_320 (1-293) x US-11-000-463-102 (1-3969)
                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Tang,
                                                                                                                                               No . :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1103 CTGGAAGGC 1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1052 GAGGCTGCCTTG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     992 AATGAAATCAAATACATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           145 GlyAlaileValTyrCysValGlyValLysAsp------PheAsnGluThrGln 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   932 TATGCGGTGGCCGTCCTGGGCTACTACAACCGCAGGGGGGATCAATCCAGAAACTTTTCTA 991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuGlnGly 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ------LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACGACAGCCCAGACCTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGA 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Liu, Chenghua
Asundi, Vinod
Chen, Rui-hong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qian, Xiaono
Wang, Zhiwei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wehrman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/11000463 o. US20050266423A1
                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Y Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Xiaohong B.
                                              0.0569
107.00
37.93%
24.14%
7.01%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       - AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGC 1102
                                                                 Conservative: Mismatches: Indels:
                                                                                                                            Length:
Matches:
```

```
á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                           밁
                                                                                       Ş
                                                                                                                                                      8
                                                                                                                                                                                           밁
                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                   S
                          Ş
                                                                                                                            밁
1105 CTGGAAGGC 1113
                                                              1054 GAGGCTGCCTTG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     526
                                                                                                                                                                                                                                                                                                                                                      107 GluAsnArgGlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeu 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      583
                                                                                         161 LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 180
                                                                                                                                                           145 GlyAlaIleValTyrCysValGlyValLysAsp-----PheAsnGluThrGln
                                                                                                                                                                                                                                                                                         127 HisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                        643 CAGATCCAGGTTGGAGTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---
                                                                                                                            994 AATGAAATCAAATACATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGAT
                                                                                                                                                                                                                                                           874 CACGACAGCCCAGACCTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGA
                                                                                                                                                                                                                                                                                                                                                                                        760 GGAACAGAGACCCGGACGGCATTTGGCATTGAATTTGCACGCTCAGAGGCTTTCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12
                                                                                                                                                                                                                                                                                                                                                                                                                        90 AspThrTyrMetHisGluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyr 106
                                                                                                                                                                                           TATGCGGTGGCCGTCCTGGGCTACTACAACCGCAGGGGGATCAATCCAGAAACTTTTCTA
                                                                                                                                                                                                                                                                                                                         GTTGGAAGGAAGGGAGCCAAG-----AAGGTGATTGTCATCACAGATGGGGAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuGlnGly 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluaspargGluGlnIleargGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGGGTGGAGGTTCAGCACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---
                                                                                                                                                                                                                            ------LeuphePheTyrSerGluArgGluAlaAsnArgSerArgAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysTyrGlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHis
                                                                AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGC
                                                                                                                                                                                                                                                                                              -----
                                                                                                                                                                                                                                                                                                                             873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31
                                                                                                                                                                                                993
                                                                                                                                                                                                                                144
                                                                                                                                                                                                                                                              933
                                                                                                                                                                                                                                                                                                                                                                                             819
                                                                                                                                                                                                                                                                                                                                                                                                                                                           759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          49
                                                                                                                                                                                                                                                                                             129
```

Search completed: December 19, 2005, 02:30:09
Job time : 258.436 secs

Run

```
Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM protein - protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB DB
   550
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              seq length:
seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IBsued_Patents_AA:*

1: /cgn2_6/ptodata/1/iaa/5_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/H_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/H_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/RE_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_41_227
970
1 GGFDLYFILDKSGSVLHHWN.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           December 14, 2005, 11:02:37 ; Search time 16.8637 Seconds (without alignments) 916.781 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   572060 Beqs, 82675679 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapop 10.0 ,
   GGFDLYFILDKSGSVLHHWN.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000000000
   GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapext 0.5
US-10-104-047-2639
PCT-US95-04439-1
US-08-286-889-37
US-08-485-618-37
US-08-485-652-37
US-08-485-293A-37
US-08-913-043-37
US-08-913-043-37
US-09-193-043-37
US-09-193-043-37
US-09-193-043-37
US-09-688-307A-37
US-08-485-612-55
US-08-485-672-55
US-08-485-293A-55
US-08-193-043-55
US-08-193-043-55
US-08-193-043-55
US-08-193-043-55
US-08-193-043-55
US-08-193-043-55
US-08-193-043-55
US-08-286-889-46
US-08-482-293A-46
US-08-482-293A-46
US-08-943-363-46
US-08-943-363-46
US-08-913-043-46
US-08-913-043-46
US-08-913-043-46
US-08-913-043-46
US-08-913-043-46
US-08-913-043-46
US-09-193-043-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .LQGIIHSILKKSCIEILAAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ltd.
Sequence 2639, Ap
Sequence 1, Appli
Sequence 37, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2639, Application US/10104047

| Patent No. 6943241
| GENERAL INFORMATION:
| APPLICANT: HELIX RESEARCH INSTITUTE
| TITLE OF INVENTION: No. 6943241e1 full length cDN
| FILE REFERENCE: H1-A0105
| CURRENT APPLICATION NUMBER: US/10/104,047
| CURRENT FILING DATE: 2002-03-25
| PRIOR APPLICATION NUMBER:
| PRIOR APPLICATION NUMBER:
| PRIOR APPLICATION NUMBER:
| PRIOR APPLICATION NUMBER:
| PRIOR ETLING DATE:
| SOFTWARE: PatentIn Ver. 2.1
| SEQ ID NO 2639
| LENGTH: 488
| TYPE: PRT
| ORGANISM: Homo sapiens
| US-10-104-047-2639
                                                                                                                       RESULT 2
PCT-US95-04439-1
                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                        ર્
                                                                                                                                                                                                                                                                                                                            멼
                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                 뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1
US-10-104-047-2639
                                                                                      Sequence 1, Application PC/TUS9504439 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 56.7%; Score 550; DB 2
Best Local Similarity 59.9%; Pred. No. 1e-54;
Matches 109; Conservative 35; Mismatches
 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         183
                                                                                                                                                                                                                                                                                   123 REANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCIE 182
                                                                                                                                                                                                                                                                                                                                     103
                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                                                                      63
                                                                                                                                                                                                                                                                                                                                                                                                        43
                                                                                                                                                                                                                                                                                                                                                                                                                                       w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IL 184
                                                                                                                                                                                                                                                                                                                                     SKGLEDLKRVSPVGETYTHEGLKLANEQT--QKAGGLKTSSITTALTDGKLDGLVPSYAE
                                                                                                                                                                                                                                                                                                                                                      RQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSE 122
                                                                                                                                                                                                                                                                                                                                                                                                      FDLYFVLDKSGSVANNWIEIYNFVQQLAERFVSPEMRLSFIVFSSQATIILFLTGDRGKI
                                                                                                                                                                                                                                                                                                                                                                                                                          FDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQI
                                                                                                                                                                                                                                                                KEAKISRSLGASVYCVGVLDFEQAQLERIADSKEQVFPVKGGFQALKGIINSILAQSCTE
The Upjohn Company Heinrikson, Robert L. Anderson, Donald C. Tomich, Che-Shen C. Fairbanks, Michael B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-350-259-46
US-08-485-618-53
US-08-362-652-53
US-08-605-672-53
US-08-482-293A-53
US-09-193-073-53
US-09-193-073-53
US-09-193-073-53
US-09-795-872-5
US-08-476-062A-43
PCT-US96-0314-43
5424399-2
US-08-173-497-3
US-08-286-889-3
US-08-286-889-3
US-08-362-652-3
US-08-362-652-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 46, Appl
Sequence 53, Appl
Sequence 53, Appl
Sequence 53, Appl
Sequence 53, Appl
Sequence 53, Appl
Sequence 53, Appl
Sequence 53, Appl
Sequence 5, Appl
Sequence 43, Appl
Sequence 43, Appl
Sequence 3, Appl
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2:
```

102 62

160

```
밁
                                                                                                                                                                                                                                             RESULT 3
                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                               ર
                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                           US-08-286-889-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCT-US95-04439-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 616/JUTELEX: 224401
TELEX: 224401
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
SEQUENCE 435 amino acids
TENGTH: 435 amino acids
                                                                                                                                                                                    Sequence 37, Apprint No. 5470953
                                                                                                                                                                        GENERAL INFORMATION:
                                                                                       NERAL INFORMATION W. MICH
APPLICANT: Gallatin, W. MICH
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5470953el Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Bajt, Mary L. TITLE OF INVENTION: MAC-TITLE OF INVENTION: BLOC
                                         NUMBER OF ENQUENCES: 51
CORRESPONDENCE ADDRESS:
ADDRESSES: Marshall, O'Toole, Gerstein, Murray & Borun
ADDRESSES: Marshall, O'Toole, G310 Sear Tower
STREET: L.S
STREET: Chicago
CITY: Chicago
Illinois
Inited
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: Gateway 2000 P5-90
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: The Upjohn Company, Intellectual Property Law
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: 616/385-5210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: 616/385-6897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Darnley, James D., Jr. REGISTRATION NUMBER: 33,673 REFERENCE/DOCKET NUMBER: 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                 394
                                                                                                                                                                                                                                                                                                                                                                   337
                                                                                                                                                                                                                                                                                                                                                                                                     107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       229
                                                                                                                                                                                                                                                                                                                                                                                                                                     279 RIHFTFKEFONNPNPRSLVKPITOLL--GRTHTATGIRKVVRELFNITNGARKNAFKILV 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GGFDLYFILDKSGSVL-HHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTED-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                49001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                 VFPVNDGFQALQGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                   VITDGEKFGDPLGYEDVIPEADRE----GVIRYVIGVGDAFRSEKSRQELNTIASKPPRDH
                                                                                                                                                                                                                                                                                                                                                                                                     ALTDGELHEDLFFYSE--REANRSRDLGAIVYCVGVKDFNETQLAR-----IADS--KDH 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGSDIAFLIDGSGSIIPHDFRRMKEFVST-----VMEQLKKSKTLFS-----LMQYSEEF
                                                                                                                                                                                                                                                                                                 VFQVNN-FEALKTIQNQLREK 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ------REQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVII 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3
                                                                                                                                                                                                             Application US/08286889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 Henrietta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  lamazoo
   United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MAC-1 I-DOMAIN PROTEIN USEFUL IN BLOCKING ADHESION AND MIGRATION OF NEUTROPHILS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14.7%; Score 142.5; DB 4; 26.9%; Pred. No. 9.4e-08; tive 41; Mismatches 67;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCT/US95/04439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4767.P CN1
                                                                                                                         2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 435;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
```

```
; MOLECULE TYPE: protein US-08-286-889-37
                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-485-618-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Sim
Matches 53;
                                                                                                                                                                                                                                                                                                                                                              Sequence 37, Application US/08485618
Patent No. 5728533
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, VG
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph
REGISTRATION NUMBER: P38,65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: 1
                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy of COMPUTER: IBM PC com
                                                                                                                                                                                                                                                                                                      APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5728533el Human
                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 312-474-63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                        STREET:
APPLICATION NUMBER:
                                                                                                                                         ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313 LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        168 LQGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              257 PLEYSDVIPAADKA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   117 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFFVNDGFQA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           202 DPQSLVDPIVQLQ---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   58 DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              H: 1151 amino acide amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60606-6402
                                                                                                                                                                                                                        233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                               United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                           Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14.6%; Score 141.5; DB 27.7%; Pred. No. 5e-07; tive 38; Mismatches
                                                                                                                                                                                                                                                                                        103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/286,889
US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27866/32168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Version
                                          Version #1.25
                                                                                                                                                                                                                                                                                                           2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
```

```
ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-362-652-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 , MOLECULE TYPE: protein US-08-485-618-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 37, Application US/08362652
Patent No. 5766850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION NUMBER: US 08/362,652
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM COMPARTIBLE
COMPUTER: COMPARTIBLE
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: PALENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 21-DEC-1994
ATTORNEY AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32797
                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5766850el
NUMBER OF SEQUENCES: 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                           CITY: Chicago
STATE: Illino:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            y Match 14.6%; Score 141.5; DB 1; Length 1151;
Local Similarity 27.7%; Pred. No. 5e-07;
nes 53; Conservative 38; Mismatches 75; Indels 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                 ZIP: 60606-6402
                       APPLICATION NUMBER: US/08/362,652 FILING DATE:
                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 1151 amino acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                168 LOGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         142 DIAPLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           58 DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LRSIQRQLQEK 323
                                                                                                                                                                                                                                             Illinois
                                                                                                                                                                                                                                                                                    E: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                        United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       37:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38,
                                                                                                                                                                                                                                                                                                                                                                              Human
                                                                                                                                                                                                                                                                                                                                                                            2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10
```

```
US-08-605-672-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-362-652-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 37, Application US/08605672 Patent No. 5817515 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 08/
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                             ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                STREET: Chicago
CITY: Chicago
ThatB: Illinois
Thatted
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
                                                                                                                               SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5817515el Human
NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: ami
TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 1154
TYPE: amino acid
                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 27.7 nes 53; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 312-474-0448
                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                  COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 271
                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313 LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          117 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI----ADSKDHVFFVNDGFQA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    58 DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LQGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                           E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1151 amino acids
                                                                                                                                                                                                                           Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14.6%; Score 141.5; DB 27.7%; Pred. No. 5e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    38; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                     2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
```

57 10

5-AUG-1994

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 7
US-08-482-293A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-605-672-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICALL..

APPLICALL...

FILING DATE: 21-DEC-1...

ATTORNEY/AGENT INFORMATION:

NAME: Williams Jr., Joseph A.

REGISTRATION NUMBER: 38,659

REFERENCE/DOCKET NUMBER: 27866/

TELECOMMUNICATION INFORMATION:

TOTREPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent No. 5831029
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 37, Application US/08482293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 37:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PILING DATE: 5-AUG-1
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC COMPUTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5831029el Human 2 Integrin Alpha Subunit
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
                                                                             APPLICATION NUMBER: US/08/482,293A FILING DATE: CLASSIFICATION: 530 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 08/173,497 FILING DATE: 23 DEC-1993
                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                               STREET: 233 So
CITY: Chicago
STATE: Illinoi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: 312-474-63
TELEFAX: 312-474-0448
TELEX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14.6%; Score 141.5; DB 1; Local Similarity 27.7%; Pred. No. 5e-07; les 53; Conservative 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   117 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313 LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              168 LQGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                58 DREQIROGLEELOKVLPGGDTYMHEGFERASEQIYYENROGYRTA-SVIIALTDGELHED 116
APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                      60606-6402
                                                                                                                                                                                                                                                                                                                                                                                          Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                256
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 8
US-08-943-363-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-482-293A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 14.6%; Score 141.5; DB 1; Best Local Similarity 27.7%; Pred. No. 5e-07; Matches 53; Conservative 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 37, Application US/08943363 Patent No. 5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM Form Flops/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 1151 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
               APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
                                                                                            FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: 312-4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 233 Sout
CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  313 LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             117 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               58 DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                  RY: United States 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LQGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E: Marshall, O'Toole, Gerstein, Murray & Borun
233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-DEC-1994
21-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US 08/362,652
                                                                                                                                                                                                                                   US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                               #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
```

```
ş
                                       밁
                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 9
US-09-193-043-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś

// MOLECULE TYPE: protein
US-08-943-363-37
                                                                                                                                                                                                               ; ORGANISM: Rattus rattus US-09-193-043-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 37, Application US/09193043
Patent No. 6251395
GENERAL INFORMATION:
                                                                                                                       Query Match 14.6%; Score 141.5; DB 2; Best Local Similarity 27.7%; Pred. No. 5e-07; Matches 53; Conservative 38; Mismatches 75;
                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin
SEQ ID NO 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/193,043
CURRENT FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 6251395el Human
FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                                                                                                      EARLIER FILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                EARLIER FILING DATE: 1994-12-21 EARLIER APPLICATION NUMBER: 08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                         TYPE: PRT
                                                                                                                                                                                                                                                                             LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Williams Jr., Joseph J
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 271
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
les 53; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313
                                       142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      117 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
58 DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 116
                                                                                                                                                                                                                                                                             1151
                                                                                 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                             DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1151 amino acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14.6%; Score 141.5; DB llarity 27.7%; Pred. No. 5e-07; Conservative 38; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       37:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75;
                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1151;
                                                                                                                                                                 Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                         25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25;
                                                                                   57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10
```

```
Ś
                                                                               밁
                                                                                                                   S
맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
US-09-688-307A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                ; OTHER INFORMATION: Xaa = any or unknown amino acid US-09-688-307A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1993-12-23
PRIOR APPLICATION NUMBER: 08/386,889
PRIOR PILING DATE: 1994-08-05
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR FILING DATE: 1994-12-21
PRIOR APPLICATION NUMBER: 08/943,363
PRIOR FILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                Matches
                                                                                                                                                                                    Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 37, Appli
Patent No. 6432404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 1151

TYPE: PRT
ORGANISM: Rattus rattus
FEATURE:
NAME/KEY: misc feature
LOCATION: 361
OTHER INFORMATION: Xaa = a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 643240441 Human Beta-2
FILE REFERENCE: 27866/36646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/688,307A CURRENT FILING DATE: 2000-10-13 PRIOR APPLICATION NUMBER: 09/193,043 PRIOR FILING DATE: 1998-11-16 PRIOR APPLICATION NUMBER: 08/605,672 PRIOR APPLICATION NUMBER: 08/173,497 PRIOR APPLICATION NUMBER: 08/173,497
                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature
LOCATION: 1117
OTHER INFORMATION: Xaa =
                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature
LOCATION: 506
OTHER INFORMATION: Xaa =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature
LOCATION: 1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Xaa =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 464
OTHER INFORMATION: Xaa =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 486
                                                                                 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  117 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFFVNDGFQA 167
202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     168 LOGITHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                257 PLEYŚDVIPAADKA---ĠIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             58 DREQIRQGLESLOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 116
                                                                                                                     4 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                            h 14.6%; Score 141.5; DB 2; Similarity 27.7%; Pred. No. 5e-07; 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PatentIn
                                                                               DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/09688307A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.0
                                                                                                                                                                                                                                                                                                                               any or unknown amino acid
                                                                                                                                                                                                                                                                                                                                                                                           any or unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                     any or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   any or unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               any or unknown amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                         unknown
                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                         amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
                                                                                                                                                                                                     DB 2; Length 1151;
                                                                                                                                                                  Indels
                                                                                                                                                                25;
                                                                                                                          57
```

```
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 11
US-09-350-259-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                              US-08-485-618-55
                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                     RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-350-259-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Pate
SEQ ID NO 37
LENGTH: 1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loc
Matches
                                                                    Sequence 55, Application US/08485618
Patent No. 5728533
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5728533el Human
NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pequence 37, App.
Patent No. 662091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EARLIER FILING DATE: 1994-12-21
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EARLIER FILING DATE: 1993-12-23
EARLIER APPLICATION NUMBER: 09/286,889
EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/350,259
CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/193,043
EARLIER FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 662091561 Human 2
FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT ORGANISM: Rattus
                CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              117
                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                  168
                                                                                                                                                                                                                                                                                                                                                                        257
                                                                                                                                                                                                                                                                                                                                                                                                               117 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI----ADSKDHVFPVNDGFQA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                   202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        58 DREQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 Similarity
53; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PatentIn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LQGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI----ADSKDHVFPVNDGFQA
Chicago
                                                                                                                                                                                                                                                                                                                                  LQGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                        PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                           LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09350259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14.6%; Score 141.5; DB 2;
27.7%; Pred. No. 5e-07;
Mismatches 75;
                                                                                               N
                                                                                               Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             312
                                                                                                                                                                                                                                                                                                                                                                          312
                                                                                                                                                                                                                                                                                                                                                                                                                                                     256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         57
                                                                                                                                                                                                                                                         RESULT 13
US-08-362-652-55
                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; MOLECULE TYPE: protein US-08-485-618-55
                                                                                                                                                                                                                Sequence 55, Application US/08362652 Patent No. 5766850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/ACENT INFORMATION:
                                                                                                                 GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5766850el
NUMBER OF SEQUENCES: 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: WILLIAMS Jr., JOSEPH A. REGISTRATION NUMBER: 38,659 REFERENCE/DOCKET NUMBER: 2786 TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
  STREET: 22.
STREET: 11inois
Thited
                                                  ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX:
                                                                                                                                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                                                                                                                          168 LOGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                     117 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            212 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         152 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  58 DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                 PLEYSDVIPAADKA--
                                                                                                                                                                                                                                                                                                                                      LRSIQRQLQEK 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       312-474-0448
    United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14.6%; Score 141.5; DB 1
27.7%; Pred. No. 5.1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   55
                                                                                                                                                                                                                                                                                                                                                                                                                   GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                         Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Version
                                                                                                                                         2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      75;
```

Length 1161; Indels

25;

10

211 57

```
Sequence 55, Application US/08605672

Patent No. 5817515

GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITIE OF INVENTION: No. 5817515el Hu
NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                        US-08-605-672-55
                                                                                                                                                                                                                                                                                                                                                                               RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-362-652-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatil
                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Marchall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
                                                                                                                   STREET: 233 So
CITY: Chicago
STATE: Illinoi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        y match
Local Similarity 27.7%; Pred. No. 5.1e-07;
hes 53; Conservative 38; Miamar-hon 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            152 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 211
                                                                                                                                                                                                                                                                                                                                                                                                                                         323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          117 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFFVNDGFQA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LQGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 116
                                                                                                                                                                                                                                                                                                                                                                                                                                       LRSIQRQLQEK 333
                                                                                              Illinois
: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     312-474-0448
PC-DOS/MS-DOS
                                                                                                                                                                                                                                       Human
                                                                                                                                                                                                                                   2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25;
                                                                                                                                                                                                                                       Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10;
```

```
US-08-482-293A-55
                                                                                                                                                                                                                                                                                                                                                                                               RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                      Sequence 55, Application US/08482293A
Patent No. 5831029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                             MERAL INFORMATION: W. Michael APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5831029el Human 2 Integrin Alpha Subunit
                                                                                                                           STREET: STREET: Chicago
CITY: Chicago
Illinois
United
                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSES: Marshall, O'Toole, Gerstein, Murray & Borun
ADDRESSES: Marshall, O'Toole, G300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 08/362
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 5-AUG-1: PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 23-DEC-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 110.
TYPE: amino acid
                                                                                                                 ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US
                                                                                                               COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 312-4'
TELEX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                          323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  267 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   117 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     152 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           212 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
53; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                        LRSIQRQLQEK 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14.6%; Score 141.5; DB 1; larity 27.7%; Pred. No. 5.1e-07; Conservative 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    us 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27866/32684
                     Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          57
```

```
FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
PILING DATE: 23-DEC-1993
PRIOR APPLICATION NUMBER: US 08/286,889
PRIOR APPLICATION NUMBER: US 08/362,652
PILING DATE: 5-AUG-1994
PRIOR APPLICATION NUMBER: US 08/362,652
PILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Ur., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32684
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
TELEPHONE: 312-474-0448
TELEPHONE: 312-474-0448
TELEPHONE: 1161 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-482-293A-55
Search completed: December 14, 2005, 11:21:07 Job time : 17.8637 secs
                                                                           밁
                                                                                                        Ş
                                                                                                                                                    밁
                                                                                                                                                                               δ
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                             Query Match 14.6%; Score 141.5; DB 1; Length 1161; Best Local Similarity 27.7%; Pred. No. 5.1e-07; Matches 53; Conservative 38; Mismatches 75; Indels 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 530
                                                                       323
                                                                                                                                                                           117 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 167
                                                                                                                                                                                                                             168 LOGIIHSILKK 178
                                                                                                                                                  267 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA 322
                                                                                                                                                                                                                                                                                                      58 DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 116
                                                                                                                                                                                                                                                                                                                                         4 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE-----
                                                                         |: | : : |
LRSIQRQLQEK 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                     Indels 25; Gaps
                                                                                                                                                                                                                                                                                                                                               57
                                                                                                                                                                                                                                                                                                                                                                                     10;
```

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score
           1000.00
1000.00
1000.00
1000.00
1000.00
1000.00
1000.00
1000.00
1000.00
1000.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_41_227
970
1 GGFDLYFILDKSGSVLHHWN.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 December 14, 2005, 11:18:07 ; Search time 56.3373 Seconds (without alignments) 1386.897 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1867569 segs, 417829326 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Published Applications AA Main:*
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGFDLYFILDKSGSVLHHWN.....LQGIIHSILKKSCIEILAAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
           멂
                         US-10-038-307-26
US-09-796-753-12
US-09-796-753-12
US-10-038-307-2
US-10-038-307-22
US-10-038-307-22
US-10-038-307-22
US-10-038-307-22
US-10-201-292-24
US-10-201-292-24
US-10-201-292-34
US-10-201-292-34
US-10-201-292-34
US-10-201-292-34
US-10-201-292-34
US-10-201-292-34
US-10-201-292-34
US-10-201-292-34
US-10-201-292-34
US-10-201-292-34
US-10-301-292-36
US-10-301-292-30
US-10-301-292-30
US-10-301-292-20
US-10-301-292-20
US-10-301-302-20
US-10-301-302-20
US-10-301-302-302-303
US-10-301-302-303
US-10-301-302-303
US-10-301-302-303
US-10-301-302-303
US-10-301-302-303
US-10-301-302-303
US-10-301-302-303
US-10-474-794-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1867569
Sequence 26, Appl Sequence 27, Appl Sequence 12, Appl Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 22, Appli Sequence 24, Appli Sequence 24, Appli Sequence 24, Appli Sequence 27, Appli Sequence 28, Appli Sequence 28, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli Sequence 187, Appli Sequence 20, Appli Sequence 218, Appli Sequence 218, Appli Sequence 218, Appli Sequence 218, Appli Sequence 218, Appli Sequence 219, Appli Sequence 210, Appli Sequence 210, Appli Sequence 210, Appli Sequence 210, Appli Sequence 210, Appli Sequence 210, Appli Sequence 210, Appli Sequence 210, Appli Sequence 210, Appli Sequence 217, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequence 2187, Appli Sequenc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
                                                                                                                                       RESULT 2
US-10-201-292-26
    Sequence 26, Application US/10201292
Publication No. US20030144193A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
```

D Q	Q Q	& B &	Query M Best Lo Matches	RESULT 1 US-10-038-: Sequence Publicat: GENERAL: APPLICAL		28 29 30 30 33 33 33 33 34 44 44 44 44 44 44 44 44
181 IE    221 IE	101 QI 121 SB    161 SE	1 G 41 G 61 Q1	atch cal 18	26, 26, 10n N NT: J NT: J NT: J NT: SEREN FEREN APPL FILLI FILLI FILLI FILLI SM: H SM: H		970 970 965 961 961 961 961 961 961 949 949 949 949 949
IEILAAE 187         EILAAE 227	RQGLEELQI RQGLEELQI REANRSRDI	FDLYFILDI	100 Similarity 100 7; Conservative	pplicat. US200. IV. US200. IV. US200. IV. IV. IV. IV. IV. IV. IV. IV. IV. IV		100.0 100.0
7 7	CGAIVY	CAT bec		ion US/10 30134786A. 30134786A. ROTTWAN R. O. KEEF! KAYNAK HEALEY Tango 197 -253-99 UVMBER: U. 2002-06 : 26 : 26 r Windows		0 0 4 6 0 0 0 0 0 0 0 4 0 0 0 0 0 0 0 0
	§=§ #=	H H	9 4	/10 36A 36A 387 287 197 999		υρυυα440υυ444444444444444444444444444444
	QIRQGLEELQKVLPGGDTYWHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFF QIRQGLEELQKVLPGGDTYWHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFF SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKS	GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE 	Score 970; DB 4; L Pred. No. 6.6e-93; 0; Mismatches 0;	n US/10038307 134786A1 O'KEEFE YNAK HEALEY ngo 197 and Tango 216 Compositions 53-999 2002-06-28 26 Windows Version 4.0	ALIGNMENTS	US-10-979-159-232 US-11-047-278-6 US-09-833-245-620 US-09-918-715-194 US-09-918-715-301 US-10-474-794-301 US-10-474-794-301 US-10-979-159-301 US-10-201-292-30 US-10-201-292-30 US-10-2038-307-12 US-10-038-307-14 US-10-038-307-16
	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	IVFSTRGTTLMKLIBDRE 60	ength 328; Indels 0; Gaps 0	s and Methods		Sequence 232, App Sequence 6, Appli Sequence 620, App Sequence 194, App Sequence 301, App Sequence 194, App Sequence 194, App Sequence 301, App Sequence 30, Appl Sequence 17, Appl Sequence 12, Appl Sequence 12, Appl Sequence 11, Appl Sequence 14, Appl Sequence 16, Appl Sequence 16, Appl Sequence 16, Appl Sequence 16, Appl Sequence 16, Appl Sequence 11, Appl

```
; APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197
; FILE REFERENCE: 7853-253-999
; CURRENT APPLICATION NUMBER: US/10/201,292
; CURRENT FILING DATE: 2003-02-14
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 26
; SEQ ID NO 26
; SEQ ID NO 26
; TANGETH: 328
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-201-292-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 3
US-09-796-753-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 12, Application US/09796753 Publication No. US20030027998A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: 7853-227-999
CURRENT APPLICATION NUMBER: US/09/796,753
CURRENT FILING DATE: 2001-03-01
                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: McCarthy, Sean A.
TITLE OF INVENTION: SECRETED PROTEINS AND USES THEREOF
                                                                                                     OR FILING DATE: 1999-06-29
IR APPLICATION NUMBER: 09/34
IR FILING DATE: 1999-06-30
IR APPLICATION NUMBER: 09/36
IR FILING DATE: 1999-07-30
IR FILING DATE: 1999-07-30
                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 09/223,546
FILING DATE: 1998-12-30
FILING DATE: 1998-12-30
                                APPLICATION NUMBER: 09/3
FILING DATE: 1999-09-20
APPLICATION NUMBER: 09/4
FILING DATE: 1999-09-30
                                                                                                                                                                                                APPLICATION NUMBER: 09/
FILING DATE: 1999-06-18
APPLICATION NUMBER: 09/
                                                                                                                                                                                                                                                       FILING DATE: 1999-0
APPLICATION NUMBER:
FILING DATE: 1999-0
                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 1999-C APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 09/
FILING DATE: 1998-12-30
APPLICATION NUMBER: 09/
FILING DATE: 1999-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVEPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 IEILAAE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101 QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IEILAAE 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7853-227-999
                                                                                                                                                                                                                                                                                          1999-03-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-10-30
                                                                                                                                                                                                                                                       1999-05-14
                                                                                                                                                                                                                                                                                                                              1999-02-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                   09/224,246
               09/471,179
                                                                                     09/399,723
                                                                                                                         09/365,164
                                                                                                                                                              09/345,464
                                                                                                                                                                                                                                      09/336,536
                                                                                                                                                                                                                                                                        09/312,359
                                                                                                                                                                                                                                                                                                             60/122,458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09/183,175
                                                 09/409,634
                                                                                                                                                                                                  09/342,687
                                                                                                                                                                                                                                                                                                                                               09/259,388
                                                                                                                                                                                                                                                                                                                                                                                                                                                            09/223,094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 970; DB 4;
Pred. No. 6.6e-93;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 328;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
```

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
             NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Win
SEQ ID NO 2
SEQ ID NO 2
LENGTH: 333
TYPE: PRT
ORGANISM: Homo sapiens
US-10-038-307-2
                                                                                                                                                                                                                                                                                                                              US-10-038-307-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-796-753-12
                                                                                                                    Sequence 2, Application US/10038307
Publication No. US20030134786A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Sudith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and
FILE REFERENCE: 7853-259
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NITHERED OF SEC. TO NOC. 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS:
SEQ ID NO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 09/677,751
PRIOR FILING DATE: 2000-09-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 2000-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 333
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DR FILING DATE: 1999-12-2
DR APPLICATION NUMBER: 09
DR FILING DATE: 1999-12-2
DR APPLICATION NUMBER: 09
DR FILING DATE: 2000-02-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 09/606,565
FILING DATE: 2000-06-29
APPLICATION NUMBER: 09/606,317
FILING DATE: 2000-06-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 09/630,334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 2000-(
APPLICATION NUMBER:
FILING DATE: 2000-(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 09/
FILING DATE: 2000-03-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                       221
                                                                                                                                                                                                                                                                                                                                                                                                                                         181 IEILAAE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101 QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41 GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGFDLYFILDKSGSVLHHWNBIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                     IEILAAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                          for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000-02-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000-09-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000-07-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000-06-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000-05-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1999-12-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 970; DB 3; 100.0%; Pred. No. 6.7e-93; o. Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09/599,596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09/516,745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09/572,002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09/474,072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09/597,993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09/514,010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                      Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    160
```

Query Match

100.0%;

Score 970;

DB 4;

Length 333;

```
Sequence 2, Application US/10201292

Publication No. US20030144193A1

GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEPE
APPLICANT: Engin OZKAYNAK
APPLICANT: Theresa L. O'KEEPE
APPLICANT: Theresa L. O'KEEPE
APPLICANT: UJdith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 333
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                            WS-11-047-278-8
US-11-047-278-8
; Sequence 8, Application US/11047278
; Publication No. US20050196407A1
; GENERAL INFORMATION;
                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 5
US-10-201-292-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 970; DB 4; Best Local Similarity 100.0%; Pred. No. 6.7e-93; Matches 187; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity Matches 187; Conserv
             APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
 REFERENCE: 960296.97745
                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                  221
                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                 161
                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          187;
                                                                                                                                                                                                                                                                                                                                                                                  19
                                                                                                                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ب
                                                                                                                                                                                                                                                                                                                                                 QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
                                                                                                                                                                                                                                                                                                                                                                                                                 GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE
                                                                                                                                                                                                                                                                                                    SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                      QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEREANRSRDLGAIVYCVGVKDENETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE
                                                                                                                                                                                                                  IEILAAE
                                                                                                                                                                                                                                                IEILAAE 187
                                                                                                                                                                                                                                                                                 SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IEILAAE 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IEILAAE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLKMSFIVFSTRGTTLMKLTEDRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                  227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pred. No. 6.'
; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6.7e-93;
hes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                  100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/9/970,076
PRIOR FILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 8
LENGTH: 333
TYPE: PRT
ORGANISM: Homo mapiens
                              밁
                                                            S
                                                                                                문
                                                                                                                      ð
                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo sapiens US-10-038-307-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 7
US-10-038-307-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-11-047-278-8
                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216
FILE REFERENCE: 7853-253-999
                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 22
LENGTH: 342
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 22, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%; (Best Local Similarity 100.0%; )
Matches 187; Conservative 0;
                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                               Matches
                              170
                                                               121
                                                                                                110
181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                               61
                                                                                                                                                              50
                                                                                                                                                                                                                              187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                             щ
                                                                                                                                                                                                                            h 100.0%; Score 970; DB 4; Similarity 100.0%; Pred. No. 6.9e-93; 87; Conservative 0; Mismatches 0;
                                                 SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                            QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
                                                                                                                      QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY 120
                                                                                                                                                            GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE 60
IEILAAE 187
                              SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IEILAAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IEILAAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/10038307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     227
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Compositions and Methods
```

Length 342; Indels

0

Gaps

109

```
41 GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE
                                                                                                                                                                                        1 GGFDLYFILDKSGSVLHHWNBIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRB
                         SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSC
                                                                                                          QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY 120
SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                  QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
                                                                                                                                                                                                                                                  Score 970; DB 6;
Pred. No. 6.7e-93;
Mismatches 0;
                                                                                                                                                                                                                                                                                         Length 333;
                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                Gaps
                                         180
                                                                                  160
                                                                                                                                                                  100
220
                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                    0
```

밁

230

||||||| |EILAAE 236

```
Sequence 24, Application US/10038307

Publication No. US20030134786A1

GENERAL IMFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: USING OZKAYNAK
APPLICANT: USING OZKAYNAK
APPLICANT: USING Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 8
US-10-201-292-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Homo sapiens US-10-201-292-22
                     ફ
                                                                                                                                            ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-038-307-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-038-307-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FRASTSEQ for Windows Version 4.0
SEQ ID NO 22
LENGTH: 342
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 22, Application US/10201292 Publication No. US20030144193A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                               Matches 187;
                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                          LENGTH: 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      110 QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 QIROGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEREANRSRDIGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IEILAAE 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IEILAAE 187
GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 970; DB 4; Length 342; ilarity 100.0%; Pred. No. 6.9e-93; Conservative 0; Mismatches 0. That's
                                                             100.0%; ilarity 100.0%; Conservative 0;
                                                               Score 970; DB 4;
Pred. No. 7e-93;
); Mismatches 0;
                                                                                                      Length 345;
                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                    0
                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

```
Sequence 2, Application US/11047278

| Publication No. US20050196407A1 |
| GENERAL INFORMATION: APPLICANT: Young, John A.T. |
| APPLICANT: Bradley, Kenneth A. |
| APPLICANT: Collier, Robert J. |
| APPLICANT: Mogridge, Jeremy S. |
| TITLE OF INVENTION: Anthrax Toxin Receptor |
| FILE REFERENCE: 960296.97745 |
| CURRENT APPLICATION NUMBER: US/01/047,278 |
| CURRENT FILING DATE: 2005-01-31 |
| PRIOR APPLICATION NUMBER: US/09/970,076 |
| PRIOR FILING DATE: 2001-10-03 |
| PRIOR FILING DATE: 2001-10-03 |
| PRIOR APPLICATION NUMBER: 60/251,481 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 10
US-10-201-292-24
                                                                                                                                                                                                                                                                                                              RESULT 11
US-11-047-278-2
                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-201-292-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:

APPLICANT: James B. ROTMAN

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Engin OZKAYNAK

APPLICANT: Sudith J. HEALEY

APPLICANT: Judith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods

FILE REFERENCE: 7853-253-999

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT FILING DATE: 2003-02-14

NUMBER OF SEQ ID NOS: 36

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 24, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 970; DB 4
Best Local Similarity 100.0%; Pred. No. 7e-93;
Matches 187; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 345
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101 QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 161 SERBANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 SEREANRSRDLGAIVYCYGYKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                221 IEILAAE 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 IEILAAE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 SERBANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                              181 IEILAAE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 QIRQGLEELQXVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY 120
                                                                                                                                                                                                                                                                                                                                                                                                        221 IEILAAE 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEREANRSRDIGATVYCVGVKDFNETQLARTADSKDHVFPVNDGFQALQGTTHSTLKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLKMSFIVFSTRGTTLMKLTEDRE 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/10201292
No. US20030144193A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 4; Length 345;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
```

```
; PRIOR FILING DATE: 2000-12-05; NUMBER OF SEQ ID NOS: 10; SOFTWARE: PATENTIN Ver. 2.1; SEQ ID NO 2; LENGTH: 368; TYPE: PRT; ORGANISM: Homo Bapiens
US-11-047-278-2
                                                                                                                                                                                                                                                                                                                                                                                                 PILE REFERENCE: PF546PCT
CURRENT APPLICATION NUMBER: US/09/833,245
CURRENT FILING DATE: 2001-04-12
PRIOR APPLICATION NUMBER: 60/229, 358
PRIOR FILING DATE: 2000-04-12
PRIOR FILING DATE: 2000-02-6, 931
PRIOR FILING DATE: 2000-12-21
PRIOR FILING DATE: 2000-12-21
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR FILING DATE: 2000-04-25
NUMBER OF SEQ ID NOS: 2267
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 621
LENGTH: 403
 밁
                         र्
                                                                  문
                                                                                                 ş
                                                                                                                                       밁
                                                                                                                                                                     ş
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                   ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                             Query Match 100.0%; S
Best Local Similarity 100.0%; P
Matches 187; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 621, Application US/09833245 Publication No. US20040010134A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Human Genome Sciences, Inc. TITLE OF INVENTION: Albumin Fusion Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   / Match 100.0%; Score 970; DB 6; Length 368; Local Similarity 100.0%; Pred. No. 7.7e-93; ndels
221
                                 181
                                                                   161
                                                                                                      121
                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101 QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY 160
                                                                                                                                                          61 QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                        SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGFDLYFILDKSGSVLHHMNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE 60
                                                                                           SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 180
                                                                                                                                       QIRQGLEELQKYLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IEILAAE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE 100
                               IEILAAE
                                                                   SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IBILAAE 227
                                 187
227
                                                                                                                                                                                                                                                                             Score 970; DB 3;
Pred. No. 8.7e-93;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                Length 403;
                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                              60
                                                                   220
                                                                                                                                       160
                                                                                                                                                                                                                                                                               0
```

```
APPLICANT: James B. ROTTWAN

APPLICANT: Theresa L. O'KEBFE

APPLICANT: Engin OZKAYNAK

APPLICANT: Judith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods

FILE REFERENCE: 7653-253-999

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT FILING DATE: 2003-02-14

NUMBER OF SEQ ID NOS: 36

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 32

LENGTH: 479

TYPE: PRT

ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 28
LENGTH: 460
TYPE: PRT
ORGANISM: Homo sapiens
US-10-201-292-28
                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 14
US-10-201-292-32
  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 13
US-10-201-292-28
                                                                                                                                                       US-10-201-292-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 28, Applicat Publication No. US200 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                            Matches
                                                                                                Best Local
                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 32, Application US/10201292 Publication No. US20030144193A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 970; DB 4
Best Local Similarity 100.0%; Pred. No. 1e-92;
Matches 187; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: James B. ROTTWAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Undith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions of the Reference: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181 IEILAAE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101 QIRQĞLEELQKVLPGĞDTYMHEĞFERASEQIYYENRQĞYRTASVIIALTDĞELHEDLFFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       221 IEILAAE
                                                                            187;
  41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
1 GGFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE 60
                                                                        h 100.0%; Score 970; DB 4; Similarity 100.0%; Pred. No. 1.1e-92; 87; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGFDLYFILDXSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/10201292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US20030144193A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 460
                                                                                                                 Length 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100
  100
                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

밁 ঠ 밁 Ş

밁 S

```
RESULT 15

US-10-201-292-34

(Sequence 34, Application US/10201292

Publication No. US20030144193A1

(GENERAL INFORMATION:

APPLICANT: James B. ROTTMAN

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Engin OZKAYMAK

APPLICANT: Judith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods

FILE REFERENCE: 7853-253-999

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT FILING DATE: 2003-02-14

NUMBER OF SEQ ID NOS: 36

SOTTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 34

LENGTH: 504

TYPE: PAT

ORGANISM: Homo sapiens
Search completed: December 14, 2005, 11:59:00 Job time : 56.504 secs
                                                            밁
                                                                                    δ
                                                                                                                  밁
                                                                                                                                             ð
                                                                                                                                                                                  밁
                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 970; DB 4; Length 504; Best Local Similarity 100.0%; Pred. No. 1.2e-92; Matches 187; Conservative 0; Mismatches 0; Indels
                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                              221
                                                                                                                       161
                                                                                                                                                     121
                                                                                                                                                                                   101 QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                19
                                                                                                                                                                                                                                            SEREANRSRDLGAIVYCYGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IEILAAE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 220
                                                                               IEILAAE 187
                                                                                                                                        SEREANRSRDLGAIVYCYGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 180
                                                              IEILAAE
                                                                                                                       SEREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 220
                                                                                                                                                                                                      QIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IEILAAE 227
                                                              227
                                                                                                                                                                                                                                                                                                            <u>,,</u>
                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    160
                                                                                                                                                                                      160
                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                 100
                                                                                                                                                                                                                                                                              60
```

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                     Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Title:
Perfect score:
                                                                                                                                                                                                                      Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OM protein - protein search, using sw model
Published Applications AA New:*

1: /cgn2_6/ptodata/1/pubpaa/US09 NEW_PUB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*

8: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       51441 segs, 6734002 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           December 14, 2005, 11:18:48; Search time 2.74816 Seconds (without alignments) 458.218 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-2_COPY_41_227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGFDLYFILDKSGSVLHHWN.....LQGIIHSILKKSCIBILAAE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         51441
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description	,
1	970	100.0	564	7	US-11-186-284-199	Sequence 1	199, App
N	132.5	13.7	1152	7	-11-080-026-		4, Appli
w	131	13.5	3063	7	11		
4	111.5	11.5	739	7	-11-057-047-		2, Appli
v	111.5	11.5	764	7	US-11-057-047-1		
6	111.5	11.5	798	0	10		1034, Ap
7	109	11.2	915	თ	US-10-131-826A-294		294, App
89	109	11.2	956	7	Ė		39, Appl
9	108	11.1	1141	σ	US-10-601-368-24		
10	108	11.1	1166	σ	US-10-601-368-22		
11	108	11.1	1188	σ	US-10-601-368-21		
12	104.5	10.8	828	σ	US-10-995-561-983		983, App
13	104.5	10.8	918	o	US-10-995-561-981		981, App
14	104.5	10.8	1019	0	US-10-995-561-982		982, App
15	104	10.7	1141	σ	US-10-601-368-6	Sequence 6	6, Appli
16	104	10.7	1166	σ	US-10-601-368-4	Sequence 4	4, Appli
17	104	10.7	1188	σ	US-10-601-368-3	Sequence 3	3, Appli
18	104	10.7	1188	7	US-11-000-463-338		338, App
19	104	10.7	1188	7	-81		
20	103.5	10.7	182	σ	US-10-601-368-25		25, Appl
21	103.5	10.7	761	7	-11-057-		5, Appli
22	99.5	10.3	182	σ	US-10-601-368-7	Sequence 7	7, Appli
23	95.5	9.8	1179	7	11		1, Appli
24	95.5	9.8	1196	o	US-10-995-561-921		921 Ann
25	94	ر د					100

Ś

121 SERBANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSC 180

C: 131 CEBEANDCEDT CA1	Query Match  Best Local Similarity 100. Best Local Similarity 100. Matches 187; Conservative  Qy 1 GGFDLYFILDKSGSVL	RESULT 1  US-11-186-284-199  i Sequence 199, Application US/1118  publication No. US/20050266493A1  i GENERAL INFORMATION:  APPLICANT: Millennium Pharmaceut APPLICANT: Millenette, Tracy L APPLICANT: Schlegel, Robert APPLICANT: Schlegel, Robert APPLICANT: Monahan, John E. APPLICANT: Thibodeau, Stephen N APPLICANT: Monahan, John E. APPLICANT: Burgart, Lawrence J. TITLE OF INVENTION: NOVEL GENES, TITLE OF INVENTION: NOVEL GENES, TITLE OF INVENTION: METHODS FOR TITLE OF INVENTION: THERAPY OF FILE REFERENCE: MPM01-029P2RNM CURRENT APPLICATION NUMBER: US/10/ PRIOR APPLICATION NUMBER: US/10/ PRIOR APPLICATION NUMBER: US 60/ PRIOR APPLICATION NUMBER: US 60/ PRIOR APPLICATION NUMBER: US 60/ PRIOR APPLICATION NUMBER: US 60/ PRIOR APPLICATION NUMBER: US 60/ PRIOR APPLICATION NUMBER: US 60/ PRIOR APPLICATION NUMBER: US 60/ PRIOR PILING DATE: 2002-03-05 PRIOR PILING DATE: 2002-05-20 NUMBER OF SEQ ID NOS: 228 SOFTWARE: FastSEQ for Windows Ve SEQ ID NO 199 SEQ ID NO 199 US-11-186-284-199		90 9.3 8 89.5 9.2 9 89.5 9.2
יאכיייכיישהפאפייסן אם דא הפעהעופסי	O%; Score 970; DB 7; O%; Pred. No. 8.4e-87; O; Mismatches 0; HHWNEIYYFVEQLAHKFISPQLRM HHWNEIYYFVEQLAHKFISPQLRM HHWNEIYYFVEQLAHKFISPQLRM OTYMHEGFERASEQIYYENRQGYR	96284 L. COMPOSITIONS, KITS, COMPOSITIONS, KITS, COMPOSITION, AS (IDENTIFICATION, AS (	6 US-10-510-386-6 US-10-793-626-6 US-10-513-786-6 US-10-513-786-6 US-10-793-626-6 US-10-467-657-6 US-10-467-657-7 US-11-080-026-7 US-11-192-967-7 US-11-193-715-6 US-10-674-767-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-7 US-11-193-715-6 US-10-674-7677-767-767-767-767-767-767-767-76	7 US-11-137-465-44 7 US-11-137-465-44
AIDCEONI OCTTUCTI EVEC 190	Length 564;  Indels 0; Gaps 0;  SFIVFSTRGTTLMKLTEDRE 60  SFIVFSTRGTTLMKLTEDRE 100  SFIVFSTRGTTLMKLTEDRE 120  TASVIIALTDGELHEDLFFY 120  TASVIIALTDGELHEDLFFY 160	SESSMENT, PREVENTION, AND	Sequence 158, App Sequence 2880, App Sequence 2, Appli Sequence 1, Appli Sequence 388, App Sequence 2636, App Sequence 250, App Sequence 3984, App Sequence 3984, App Sequence 7946, App Sequence 7946, App Sequence 7306, App Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 4, Appli Sequence 4, Appli	44.4

```
RESULT 2
US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT ; ORGANISM: Homo sapiens US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                           US-11-186-284-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 4, Application US/11080026 Publication No. US20050260192A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                    Sequence 26, Application US/11186284 Publication No. US20050266493A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Springer, Timothy A.
APPLICANT: Shimaoka, Motomu
APPLICANT: Shimaoka, Motomu
APPLICANT: Shimaoka, Motomu
APPLICANT: Li, Chafen
TITLE OF INVENTION: MODIFIED POLYPEPTIDES STABILIZED IN A
TITLE OF INVENTION: DESTRED CONFORMATION AND METHODS FOR PRODUCING SAME
FILE REFERENCE: CFBP-P02-021
CURRENT APPLICATION NUMBER: US/11/080,026
CURRENT FILING DATE: 2005-03-15
PRIOR APPLICATION NUMBER: US/60/229,700
REFERENCE PRIOR APPLICATION NUMBER: US/60/229,700
                                                             APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: THERAPY OF COLON CANCER
                                                                                                                                                                              APPLICANT: Millennium Pharmaceuticals,
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 4
FILE REFERENCE: MPM01-029P2RNM
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         150 DIAPLIDGSGSIIPHDFRRMKEFVST----VMEQLKKSKTLFS-----LMQYSEEFRIH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 DLYFILDKSGSVL-HHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTED----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IEILAAE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FTFKEFQNNPNPRSLVKPITQLL--GRTHTATGIRKVVRELFNITNGARKNAFKILVVIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VNDGFQALQGIIHSILKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DGELHEDLFFYSE--REANRSRDLGAIVYCVGVKDFNETQLAR----IADS--KDHVFP 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----REQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALT 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IEILAAE 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VNN-FEALKTIQNQLREK 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DGEKFGDPLGYEDVIPEADRE---GVIRYVIGVGDAFRSEKSROELNTIASKPPRDHVFQ 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13.7%; Score 132.5; DB 7; 26.3%; Pred. No. 3.6e-05; ative 41; Mismatches 66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1152;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
```

```
á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Homo US-11-186-284-26
                                                                                                                                                                  ; LENGTH: 739
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-11-057-047-2
  밁
                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows SEQ ID NO 26 LENGTH: 3063
                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn version 3.3
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/11057047 Publication No. US20050260198A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                      Matches
                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR FILING DATE: 2002-05-20
                                                                                                                                                                                                                                                                                                        APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The Alternative Complement Pathway and
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
CURRENT FILING DATE: 2005-02-10
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR APPLICATION NUMBER: 00/4-12-14
PRIOR FILING DATE: 2004-12-14
PRIOR FILING DATE: 2004-05-13
PRIOR FILING DATE: 2004-05-13
PRIOR FILING DATE: 2004-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US/10/301,822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Holers, Vernon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               609 SFELTQSIČLRIEQELAA 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          114 HEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIAD--SKDHVFPVNDGFQALQGI 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   500 VEDIÍ-----EAINTFPYRGGSTNTGKAMTYVREKÍFVPSK-GSRSNVPKVMÍLITDGK-
242 GSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKVASYGVKP--RYGLVTYATYPKIWVKV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 plyfildksgsv-lhhmneiyyfveqlahkf-isp-Qlrmsfivest---rgttlmklte 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IHSILKKSCIEI---LAA 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SSDAF---RDPAIKLKNSDVEIFAVGVKDAVRSELEAIASPPAETHVFTVED-FDAFORI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DREQIRQGLEELQKVLP--GGDTYMHEGFERASEQIYYENRQGYRT--ASVIIALTDGEL 113
                                         GGFDLYFILDKSGSV-----LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKL 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Thurman, Joshua
Taube, Christian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sapiens
                                                                                                       11.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        38;
                                                                                      44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version
                                                                                  Score 111.5; DB /;
Pred. No. 0.0022;
""matches 77;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 131; DB 7; Length 3063; 
Pred. No. 0.00018;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                        Indels
                                                                                                                             Length 739;
                                                                                        45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13
```

Length 798; Indels

45;

Gaps

10

99 358

```
US-10-821-234-1034
                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                       १
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-057-047-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                     RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-11-057-047-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
                                                                                 Sequence 1034, Application US/10821234
Publication No. US20050255114A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn vers
SEQ ID NO 1
LENGTH: 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/11057047 Publication No. US20050260198A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
      APPLICANT: Labat, Ivan
APPLICANT: Stache-Cra
APPLICANT: Andarmani,
APPLICANT: Tang, Y. To
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/636,239
PRIOR PILING DATE: 2004-12-14
PRIOR APPLICATION NUMBER: US04/015040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Inhibition of Factor B, The Alternative Complement Pathway and TITLE OF INVENTION: Methods Related Thereto FILE REFERENCE: 2848-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Gelfand, Erwin APPLICANT: Gilkeson, Gary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2004-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Holers, Vernon APPLICANT: Thurman, Josh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 22.8 hes 49; Conservative
                                                                                                                                                                                                                                                                         145
                                                                                                                                                                                                                                                                                                                    379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                 439 INALASKKONEQHVFKVKD-MENLEDVFYQMIDES
                                                                                                                                                                                                                                                                                                                                                                                                    325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100
                                                                                                                                                                                                                                                                                                                                                           100 RTASVIIALTDG------ELHEDLFFYSEREANRSRDLGAIVYCVG--VKDFN 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 414 INALASKKONEOHVFKVKD-MENLEDVFYOMIDES 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            μ
                                                                                                                                                                                                                                                                         ETQLARIADSKDHVFPVNDGFQALQGIIHSILKKS 179
                                                                                                                                                                                                                                                                                                                                                                                                 SEADSSNADWVTKQLNEINYEDHKLKSGTNT-----KKALQAVYSMMSWPDDVPPEGWN 378
                                                                                                                                                                                                                                                                                                                                                                                                                                          TE----DREQIRQGLEEL----QKVLPGGDTYMHEGFERASEQIYYENR------QGY-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKVASYGVKP--RYGLVTYATYPKIWVKV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGFDLYFILDKSGSV-----LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ETQLARIADSKDHVFPVNDGFQALQGIIHSILKKS 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEADSSNADWVTKQLNEINYEDHKLKSGTNT-----KKALQAVYSMMSWPDDVPPEGWN
                                                                                                                                                                                                                                                                                                                  RTRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKDRKNPREDYLDVYVFGVGPLVNQVN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RTRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKDRKNPREDYLDVYVFGVGPLVNQVN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RTASVIIALTDG-------ELHEDLFFYSEREANRSRDLGAIVYCVG--VKDFN 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TE----DREQIRQGLEEL----QKVLPGGDTYMHEGFERASEQIYYENR------QGY-
                                        Stache-Crain, Birgit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Thurman, Joshua
Taube, Christian
    Andarmani, Si
Tang, Y. Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         version 3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Score 111.5; DB 7; ; Pred. No. 0.0023; 44; Mismatches 77;
                                                                                                                                                                                                                                   472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           764;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  45;
                                                                                                                                                                                                                                                                                                                                                                                                                                          99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 7
US-10-131-826A-294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
PRIOR APPLICATION NUMBER: 60/059115
PRIOR APPLICATION NUMBER: 60/059117
PRIOR APPLICATION NUMBER: 60/059117
PRIOR FILING DATE: 1997-09-17
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059117
PRIOR APPLICATION NUMBER: 60/059122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR FILING DATE: 2003-04-07
RUMBER OF SEQ ID NOS: 1704
SOFTWARE: pt_SEQ_genes Version 1.0
SEQ ID NO 1034
LENGTH: 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 294, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                     TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3330R1C128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Baker, Kevin P. APPLICANT: Beresini, Maur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        473 INALASKKONEQHVFKVKD-MENLEDVFYQMIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               145 ETQLARIADSKDHVFPVNDGFQALQGIIHSILKKS 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100 RTASVIIALTDG------ELHEDLFFYSEREANRSRDLGAIVYCVG--VKDFN 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         359 SEADSSNADWVTKQLNEINYEDHKLKSGTNT-----KKALQAVYSMMSWPDDVPPEGWN 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301 GSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKVÄSYGVKP--RYGLVTYATYPKIWVKV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               56 TE----DREQIRQGLEEL----QKVLPGGDTYMHEGFERASEQIYYENR------QGY-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GGFDLYFILDKSGSV-----LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKL 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RTRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKDRKNPREDYLDVYVFGVGPLVNQVN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                     Zhang, Zemin
                                                                                                                                                                                                                                                                                                                                                                                                                     Stewart, Timothy A
                                                                                                                                                                                                                                                                                                                                                           Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                    Tumas,Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                            Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DeForge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Beresini, Maureen
                                                                                                                                                                                                                                                                                                                                                                              Watanabe,Colin K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/10131826A
o. US20050245730A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Score 111.5; DB 6;
; Pred. No. 0.0024;
44; Mismatches 77;
                                                                                                                                                                                                                                                                                                                    POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          506
```

AND NUCLEIC

```
; LENGTH: 956
; TYPE: PRT
; ORGANISM: Homo &
US-11-113-424-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-131-826A-294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
US-11-113-424-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 294
LENGTH: 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 39, Application US/11113424 Publication No. US20050260713A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                            SOFTWARE: Patentin
SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1997-09-19
PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: 21402-225
CURRENT APPLICATION NUMBER: US/11/113,424
CURRENT FILING DATE: 2005-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Gangolli et al.
TITLE OF INVENTION: Polypeptides and Nucleic Acids Encoding
                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/256,704
PRIOR FILING DATE: 2000-12-19
PRIOR APPLICATION NUMBER: 60/311,590
PRIOR FILING DATE: 2001-08-10
                                                                                                                      NUMBER OF SEQ ID NOS:
                                                                                                                                      PRIOR FILING DATE: 2001-05-29
PRIOR APPLICATION NUMBER: 60/288,153
PRIOR FILING DATE: 2001-05-02
                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/059263
FILING DATE: 1997-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/059352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/059184 FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/257,314 FILING DATE: 2000-12-20
                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/322,358
                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/311,613 FILING DATE: 2001-08-10
                                                                                                                                                                                                     APPLICATION NUMBER: 60/294,075
                                                                                                                                                                                                                     FILING DATE: 2001-09-14
                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/307,506
                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/315,617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  111 GELHEDLFFYSEREANRSRDLGAIVYCVGV--KDFNETQLARIADSKDHVFPVNDGFQAL 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           114 FKRKSEVERAVKRMRHLSTGTMTGLAIQY---ALNIAFSEAEGARPLRENVPRVIMIVTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               56 TEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYR-----TASVIIALTD 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 DLYFILDKSGSV-LHHWNEIYYF-VEQLAHKFISPQL-RMSFIVFSTRGTTL-----MKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DLVFIIDSSRSVNTHDYAKVKEFIVDILQFLDIGPDVTRVGLLQY---GSTVKNEFSLKT 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ETLTSVFOKKLC 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QGIIHSILKKSC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GRPQDSV----AEVAAKARDTGILIFAIGVGQVDFNTLKSIGSEPHEDHVFLVAN-FSQI 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                    sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1997-09-17
                                                                                                                                                                                                                                                                                                        2001-08-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11.2%; Score 109; DB 6; 24.0%; Pred. No. 0.0051;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     43; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       77; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 915;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  55
```

```
US-10-601-368-24
; Sequence 24, Application US/10601368
; Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
RESULT 10
US-10-601-368-22
                                                                                                                Ş
                                                                                                                                                            밁
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-601-368-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 46; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US/09/561,263A PRIOR FILING DATE: 2000-04-27 PRIOR APPLICATION NUMBER: US 09/322,790 PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Pan, APPLICANT: Lora
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 1141
                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             111 GELHEDLFFYSERBANRSRDLGAIVYCVGV--KDFNETQLARIADSKDHVFPVNDGFQAL 168
                                                                                                                                                                                                                                                                                                                   164 DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL-NDYRS 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   114 FKRKSEVERAVKRMRHLSTGTMTGLAIQY---ALNIAFSEAEGARPLRENVPRVIMIVTD
                                                                                  339 --KDIVDALGDRIFSLEG
                                                                                                                    153 DSKDHVFPVNDGFQALQG 170
                                                                                                                                                            280 LEKVIROSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL- 338
                                                                                                                                                                                                                                       222 VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57
                                                                                                                                                                                                                                                                                                                                                                                              48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     56 TEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYR-----TASVIIALTD 110
                                                                                                                                                                                                                                                                         62 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                                                                                   4 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DLYFILDKSGSV-LHHWNEIYYF-VEQLAHKFISPQL-RMSFIVFSTRGTTL-----MKL 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ETLTSVFQKKLC 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QGIIHSILKKSC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GRPQDSV----AEVAAKARDTGILIFAIGVGQVDFNTLKSIGSEPHEDHVFLVAN-FSQI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DLVFIIDSSRSVNTHDYAKVKEFIVDILQFLDIGPDVTRVGLLQY---GSTVKNEFSLKT 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lora,
                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jose M.
                                                                                                                                                                                                                                                                                                                                                                                                              11.1%;
24.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11.2%;
                                                                                                                                                                                                 -----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQLARIA 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;; Score 109; DB 7; Length 956; ;; Pred. No. 0.0054; 43; Mismatches 77; Indels
                                                                                                                                                                                                                                                                                                                                                                                              28;
                                                                                                                                                                                                                                                                                                                                                                                                                Score 108; DB 6; Length 1141; Pred. No. 0.0085;
                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                  84;
                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                38;
                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             225
                                                                                                                                                                                                                                             279
                                                                                                                                                                                                                                                                               116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10
```

; Sequence 22, Application No. US2005-bublication No. US2005-; GENERAL INFORMATION: ; APPLICANT: Pan, Yang ; APPLICANT: Lora, Jose

Lora, Jose

Application US/10601368 No. US20050260702A1

```
RESULT 11
US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                      밁
                                                                                                           ঠ
                                                                                                                                                                                                                                          ; ORGANISM: Mus musculus FEATURE: FEATURE: I NAME/KEY: SIGNAL J LOCATION: (1)...(22) US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Mus musculus
US-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Fast:
SEQ ID NO 21
LENGTH: 1188
                                                                                                                                                      Query Match
Best Local S
Matches 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 40
SOFTWARE: PastSEQ for Windows Version 3.0
SEQ ID NO 22
LENGTH: 1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Pan, Yang
APPLICANT: LOTE, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US/09/322,790
PRIOR PELING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR PILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF FILE REFERENCE: 07334-275001
                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
                                                                                                                                                        Local Similarity 24.:
108 48; Conservative
                                                             317 -- KDIVDALGDRIFSLEG 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         153 DSKDHVFPVNDGFQALQG 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      250 LEKVIRQSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200 VKDVVÉAASHIEQRÉGTETRTAFGIEFARSEAFQKGGRKGAK--KVMÍVITDGÉSHDSPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             142 DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL-NDYRS 199
62 IROGLEELOKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                        4 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 DLYFILDKSGSVLHHWNBIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     48;
                                                                                                                                                                                                                                                                                                                                                                                                                     FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----FNETQLARIA 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                    11.1%; Score 108; DB 6; Length 1188; 24.2%; Pred. No. 0.009; ative 28; Mismatches 84; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11.1%; Score 108; DB 6;
24.2%; Pred. No. 0.0088;
ative 28; Mismatches 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 6; Length 1166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     84;
                                                                                                                                                        Indels 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                      221
                                                                                                             61
```

```
Query Match
Best Local Similarity
Watches 50; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-995-561-983
                                             US-10-995-561-981
                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-995-561-981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-995-561-983
                                                                                                                           APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RES
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CL001559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 991
                                                                                                                                                                                                                                                                                                                                                      Sequence 981, Applic Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONSE,
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CL001559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 983
LENGTH: 828
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 983, Appublication No.
    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
NUMBER OF SEQ ID NOS: 85702
                                                                TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapiens
                                                                                                           LENGTH: 918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               219 MLPDSTEIDQDTINRIIKVMKHEAYGECYKVSCLEI 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           160 PVNDGFQALQGIIHSIL-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       163 GHVTGSPCGGIKLQAERAREEGIRLFAVAPNQNLKEQGLRDIASTPHELYR----NDYAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                111 GELHEDLFFYSEREANRSRDLGAIVYCV------GVKDFNET--QLARIADSKDHVF 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            107 VFSPPGSDRASFIKNLQGISSFRRG--TFTDCALANMTEQIRQDRSKG--TVHFAVVITD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      339 --KDIVDALGDRIFSLEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             153 DSKDHVFPVNDGFQALQG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        280 LEKVIROSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL- 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                222 VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       51 TLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTD 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   47 VYFVLDTSESVTMQSPTDILLFHMKQFVPQFISQLQNEFYLDQVALSWRYGGLHFSDQVE 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5 LYFILDKSGSV-----LHHWNE-IYYFVEQLAHKFISPQLRMSF----IVFSTRGT 50
                                                                                                                                                                                                                                                                                                                                                                                                 Application US/10995561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/10995561
o. US20050272054A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                               US20050272054A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10.8%; Score 104.5; DB 23.1%; Pred. No. 0.012; tive 37; Mismatches
    10.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQLARIA 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      354
    Score 104.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -KKSCIEI 183
    멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84;
    6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
Length 918;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 828;
                                                                                                                                                                                                                                                                                          RESPONSE, METHODS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              162
```

```
RESULT 14
US-10-995-561-982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                       RESULT 15
US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                용
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ) ORGANISM: Homo Bapiens
US-10-995-561-982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 982, Application US/10995561

Publication No. US20050272054A1

GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RES
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CL001559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 982
LENGTH: 1019
TYPE: PRT
                                                                                                                                                      Sequence 6, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 10.8%;
Best Local Similarity 23.1%;
Matches 50; Conservative 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
APPLICANT: LORA, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
                                                                                                                                                                                                                                                                                                                                                                                                            163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            111 GELHEDLFFYSEREANRSRDLGAIVYCV-----GVKDFNET--QLARIADSKDHVF 159
                                                                                                                                                                                                                                                                                                                    219
                                                                                                                                                                                                                                                                                                                                                                160 PVNDGFQALQGIIHSIL------KKSCIEI 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                    111 GELHEDLFFYSEREANRSRDLGAIVYCV------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                107 VFSPPGSDRASFIKNLQGISSFRRG--TFTDCALANWTEQIRQDRSKG--TVHFAVVITD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             219 MLPDSTEIDODTINRIIKVMKHEAYGECYKVSCLEI 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      160 PVNDGFQALQGIIHSIL------KKSCIEI 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           107 VFSPPGSDRASFIKNLQGISSFRRG--TFTDCALANMTEQIRQDRSKG--TVHFAVVITD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   47 VYFVLDTSESVTMQSPTDILLFHMKQFVPQFISQLQNEFYLDQVALSWRYGGLHFSDQVB 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51 TLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51 TLMKLTEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                47 VÝFVLDTSESVTMQSPTDILLFHMKQFVPQFISQLQNEFYLDQVALSWRYGGLHFSDQVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5 LYFILDKSGSV------LHHWNE-IYYFVEQLAHKFISPQLRMSF----IVFSTRGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5 LYFILDKSGSV------LHHWNE-IYYFVEQLAHKFISPQLRMSF----IVFSTRGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GHVTGSPCGGIKLQAERAREEGIRLFAVAPNQNLKEQGLRDIASTPHELYR----NDYAT 218
                                                                                                                                                                                                                                                                                                                                                                                                          GHVTGSPCGGIKLQAERAREEGIRLFAVAPNQNLKEQGLRDIASTPHELYR----NDYAT 218
                                                                                                                                                                                                                                                                                                                    MLPDSTEIDQDTINRIIKVMKHEAYGECYKVSCLEI 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Pred. No. 0.014; 37; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Score 104.5; DB; Pred. No. 0.016; 37; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      -GVKDFNET--QLARIADSKDHVF 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESPONSE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50
```

```
; PRIOR FILING DATE: 2000-04-27
; PRIOR APPLICATION NUMBER: US 09/322,790
; PRIOR FILING DATE: 1999-05-28
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 1141
; TYPE: PRT
; ORGANISM: Homo Bapiens
                                                                                                            Ś
                                                                                                                                                    밁
                                                                                                                                                                                Ś
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                        Ś
Search completed: December 14, 2005, 11:59:29 Job time: 3.74816 BECB
                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
NAME/KEY: SIGNAL
LOCATION: (1)...(22)
                                                                           339
                                                                                                                                                                                      117 ------FNETQLARIA 152
                                                                                                                                                                                                                                                                                                       164 DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGVVQYGEDVVHEFHL-NDYRS
                                                                                                                                                  280 LEKVIQQSERDNYTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL-
                                                                                                                                                                                                                             222 VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD
                                                                                                                                                                                                                                                                                                                                                                              48;
                                                                                                                                                                                                                                                                   62 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                                                                          4 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ
                                                                           --KDIVDALGDRIFSLEG
                                                                                                              DSKDHVFPVNDGFQALQG 170
                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                  10.7%; Score 104; DB 6 24.2%; Pred. No. 0.021; ive 28; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                28;
                                                                           354
                                                                                                                                                                                                                                                                                                                                                                                                                      6; Length 1141;
                                                                                                                                                                                                                                                                                                                                                                                    84;
                                                                                                                                                                                                                                                                                                                                                                                    38;
```

```
Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -MODEL=frame+_p2n.model -DEV-xlh
-Q=/cgn2_1/USPTO_spool/US09970076/runat_14122005_111852_21035/app_query.fasta_1.2410
-Q=/cgn2_1/USPTO_spool/US09970076/runat_14122005_111852_21035/app_query.fasta_1.2410
-DB=PublTshed_Applications_NA_Main -QFMT=fastap -SUFFIX=rnpbm -MINMATCH=0.1
-LOOPCL=0 -LOOPEXY=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -WODE=LOCAL -CUTFMT=ptc -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=200000000 -USER=US09970076_@CGN 1 1 2715_@vunat_14122005_111852_21035
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Command line parameters:
-MODEL=frame+_p2n.model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
                           4200
                                                                                                                                                                                                                                                                               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88
                                                                                                                                                                                   Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                seq length:
seq length:
                                                                                                                                                                                                                                                                                                                                                          Published_Applications NA_Main:*

1: /cgn2_6/ptodata/1/pubpna/USO7_PUBCOMB.seq:*

2: /cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*

3: /cgn2_6/ptodata/1/pubpna/USO9A_PUBCOMB.seq:*

4: /cgn2_6/ptodata/1/pubpna/USO9A_PUBCOMB.seq:*

5: /cgn2_6/ptodata/1/pubpna/USO9A_PUBCOMB.seq:*

6: /cgn2_6/ptodata/1/pubpna/USO0A_PUBCOMB.seq:*

7: /cgn2_6/ptodata/1/pubpna/USO0A_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/USO0A_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/USO0A_PUBCOMB.seq:*

10: /cgn2_6/ptodata/1/pubpna/USOA_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Xgapop 10.0 , X
Ygapop 10.0 , Y
Fgapop 6.0 , F
Delop 6.0 , F
                                                                                                                                                                                 Query
Match
    100.0
100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-2_COPY_41_227
970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           December 18, 2005, 07:35:12; Search time 599.1 Seconds (without alignments) 2581.163 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GGFDLYFILDKSGSVLHHWN.....LQGIIHSILKKSCIEILAAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9793542 segs, 4134689005 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Maximum
Listing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Copyright
                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000000000
    1008
1008
1047
1047
1056
1056
1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Match 100%
first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                   멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Xgapext
Ygapext
Fgapext
Delext
US-10-038-307-25

US-10-201-292-25

US-10-201-292-21

US-10-201-292-21

US-10-038-307-23

US-10-201-292-23

US-10-201-292-29

US-10-201-292-29
                                                                                                                                                                                                                                               SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19587084
Sequence 25,
Sequence 21,
Sequence 21,
Sequence 23,
Sequence 23,
Sequence 23,
Sequence 27,
Sequence 27,
                                                                                                                                                                                 Description
S
```

```
970 100.0 1414 10 US-11-047-278-1
970 100.0 1434 10 US-11-047-278-9
970 100.0 1434 6 US-10-047-278-9
970 100.0 1434 6 US-10-132-937-58
970 100.0 1444 6 US-10-132-931
970 100.0 1444 6 US-10-201-292-31
970 100.0 1444 6 US-10-201-292-31
970 100.0 1604 6 US-10-201-292-33
970 100.0 1609 6 US-10-201-292-33
970 100.0 1609 6 US-10-177-722-8
970 100.0 1623 6 US-10-201-292-19
970 100.0 1623 6 US-10-201-292-11
970 100.0 1623 6 US-10-201-292-19
970 100.0 1650 6 US-10-038-307-9
970 100.0 1650 6 US-10-038-307-19
970 100.0 1650 6 US-10-038-307-15
970 100.0 1650 6 US-10-038-307-15
970 100.0 1650 6 US-10-038-307-15
970 100.0 1650 6 US-10-038-307-15
970 100.0 1650 6 US-10-038-307-15
970 100.0 1650 6 US-10-201-292-13
970 100.0 1650 6 US-10-201-292-13
970 100.0 1674 6 US-10-201-292-13
970 100.0 1674 6 US-10-201-292-13
970 100.0 1674 6 US-10-201-292-15
970 100.0 1674 6 US-10-201-292-17
970 100.0 1674 6 US-10-201-292-17
970 100.0 1675 6 US-10-201-292-17
970 100.0 2272 6 US-10-201-292-17
970 100.0 2272 6 US-10-201-292-19
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2273 6 US-10-201-292-1
970 100.0 2273 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0 2272 6 US-10-201-292-1
970 100.0
```

## ALIGNMENTS

```
WESULT 1

US-10-038-307-25

(Sequence 25, Application US/10038307

Publication No. US20030134786A1

GENERAL INFORMATION:
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: NOWBER: US/10/038,307

CURRENT FALLING DATE: 2002-06-28

NUMBER OF SEQ ID NOS: 26

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 25

SEQ ID NO 25

SEQ ID NO 25

LENGTH: 1008
TYPE: DNA
OKANISM: Homo sapiens
US-10-038-307-25

Alignment Scores:
Pred. No.:
Score:
Pred. No.:
Score:
Pred. No.:
Score:
Pred. No.:
Score:
Pred. No.:
Score:
Pred. No.:
Score:
100.00$
Percent Similarity: 100.00$
Best Local Similarity: 100.00$
Best Local Similarity: 100.00$
Best Local Similarity: 100.00$
Best Local Similarity: 100.00$
US-09-970-076-2_COPY_41_227 (1-187) x US-10-038-307-25 (1-1008)

US-09-970-076-2_COPY_41_227 (1-187) x US-10-038-307-25 (1-1008)

ON 1 GlyGlyPheAspLeuTyrPheIleLeuAspLysScrGlyScrValLeuHisHisTrpAsn 20
```

```
Sequence 25, Application US/10201292

| Sequence 25, Application US/10201292
| Publication No. US20030144193A1
| GENERAL INFORMATION:
| APPLICANT: James B. ROTTMAN
| APPLICANT: Theresa L. O'KEEFE
| APPLICANT: Engin OZKAYNAK
| APPLICANT: Judith J. HEALEY
| TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
| FILE REFERENCE: 7853-253-999
| CURRENT APPLICATION NUMBER: US/10/201,292
| CURRENT FILING DATE: 2003-02-14
| NUMBER OF SEQ ID NOS: 36
| SOFTWARE: FRASESEQ for Windows Version 4.0
| SEQ ID NO 25
| LENGTH: 1008
| TYPE: DNA
| ORGANISM: Homo sapiens
| US-10-201-292-25
                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
밁
                    á
                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                             US-09-970-076-2_COPY_41_227 (1-187) x US-10-201-292-25 (1-1008)
                                                                                                                                                Alignment Scores:
                                                                                                                                    Хо
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133
                                                                                                                                                                                                                                                                                                                                                                                                                                     673
                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 IleGluIleLeuAlaAlaGlu 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 GlnIleArgGlnGlyLeuGluGluLeuGlnLygValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
 GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                   7.35e-120
970.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                     693
                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      192
                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
ঠ
                       밁
                                                                                                                                                   Score:
                                                                                                                                                              Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
```

```
Sequence 21, Application US/10038307

Publication No. US20030134786A1

GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Uddith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-2959
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-66-28
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 21
LENGTH: 1047
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 3
US-10-038-307-21
                                                                                                                    US-09-970-076-2_COPY_41_227 (1-187) x US-10-038-307-21 (1-1047)
                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          313 CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                          160
21 GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet 40
                                                                 1 GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluIleTyrTyrPheValGluGlnLeuAlaHiBLy8PheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |||eGluIleLeuAlaAlaGlu 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                               7.79e-120
970.00
100.00%
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   693
                                                                                                                                                                 Indels:
Gaps:
                                                                                                                                                                                                         Conservative: Mismatches:
                                                                                                                                                                 1047
187
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             312
                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            252
                                              219
```

```
APPLICANT: James B. ROTTWAN
APPLICANT: Theresa L. O'KEEPE
APPLICANT: Engin OZKAYNA
APPLICANT: Engin OZKAYNA
APPLICANT: Engin OZKAYNA
APPLICANT: JUdith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT PRILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 21
LENGTH: 1047
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
  밁
                ર્ક
                                              밁
                                                                 १
                                                                                       US-09-970-076-2_COPY_41_227 (1-187)
                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 4
US-10-201-292-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                श्च
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                           Pred. No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21, Application US/10201292 Publication No. US20030144193A1 GENERAL INFORMATION:
                                              160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               400
  220
                                                                                                                                                                                                                                                                                                                                                                                                                                                            700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          280
                     21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCGANATTCTAGCAGCTGAA 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ly8A8pPheAsnGluThrGlnLeuAlaArgIleAlaA9pSerLy8A8pHi8ValPhePro 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           H1sGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AMAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTG
                                                                                                                          7.79e-120
970.00
100.00%
100.00%
                                                                                         x US-10-201-292-21 (1-1047)
                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 519
                     40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . 339
 279
                                              219
                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       279
                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                ; LENGTH: 1056
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-038-307-23
                  문
                                         Ş
                                                                   밁
                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-038-307-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                 No.:
                                                                     133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   700
 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41
```

```
Sequence 23, Application US/10038307
Publication No. US2003034786A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: James B. ROTTMAN
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-99
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                     US-09-970-076-2_COPY_41_227 (1-187) x US-10-038-307-23 (1-1056)
                                            193 GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 IleGluIleLeuAlaAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          161 ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                   21 GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                             GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ThralaSerValIleIleAlaLeuThraspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAMATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                      7.89e-120
970.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     187
                                                                                                                                                                                                                                                                                    Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                 1056
187
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
  60
                                            252
                                                                                     40
                                                                                                                                      192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   160
                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               459
```

```
GENERAL INFORMATION:

APPLICANT: James B. ROTTWAN

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Engin OZKAYNAK

APPLICANT: Judith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods

FILE REFERENCE: 7853-253-99

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT EILING DATE: 2003-02-14

NUMBER OF SEQ ID NOS: 36

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 23

LENGTH: 1056

TYPE: DNA

GRGANISM: Homo sapiens

US-10-201-292-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                     ঠ
                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
US-10-201-292-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                         밁
                                                            S
                                                                                                                         US-09-970-076-2_COPY_41_227 (1-187)
유
               S
                                                                                  밁
                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 23, Application US/10201292 Publication No. US20030144193A1
                                                                                                                                                                                                      No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                    133
253
                                          193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                    41
                                                               21
                                                                                                       ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                         GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LygAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLygAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleGluIleLeuAlaAlaGlu 187
|||||||||||||||||||||||||
ATCGAAATTCTAGCAGCTGAA 693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTCTAT
SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu 60
                                                                                                                                                          7.89e-120
970.00
100.00%
100.00%
100.00%
                                                                                                                            x US-10-201-292-23 (1-1056)
                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                1056
187
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    312
                                                               40
                                                                                    192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80
                                          252
                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                     멍
                                        Ś
                                                                밁
                                                                                   á
                                                                                                                           Ś
                                                                                                         밁
                                                                                                                                                                                                                             Мо.:
```

```
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: LOGIN J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 27
LENGTH: 1401
TYPE: DNA
ORGANISM: Homo sapiens
US-10-201-292-27
                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 7
US-10-201-292-27
                                                                                                                                                                                                    US-09-970-076-2_COPY_41_227 (1-187) x US-10-201-292-27 (1-1401)
                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 27, Application No. US201 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                      673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                             253
                                                                                                                                                 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
 13
                                                         41
                                                                                                                                                                  1 GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IleGluIleLeuAlaAlaGlu
||||||||||||||
ATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                GCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCAGAGAGGGAAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATGAAGGATTTGAAAAGGGCCAGTGAGCAGATTTATTATGAAAAACAGACAAGGGTACAGG
GlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                           Application US/10201292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US20030144193A1
                                                                                                                                                                                                                                        1.22e-119
970.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              693
                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                       1401
187
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           372
                                                                                           252
                                                                                                                     40
                                                                                                                                                    192
                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                              60
      80
                                  312
```

```
Sequence 29, Application US/10201292

Publication No. US20030144193A1

GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Meth
FILE REFERENCE: 7853-299
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOPTMARE: FastSEQ for Windows Version 4.0
SEQ ID NO 29
LENGTH: 1401
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
DB:
 밁
                 ક
                                               밁
                                                                      S
                                                                                                 밁
                                                                                                                     ঠ
                                                                                                                                                  용
                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 8
US-10-201-292-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                  US-09-970-076-2_COPY_41_227 (1-187) x US-10-201-292-29 (1-1401)
                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                            8
..
313
                                                                                                   193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          433
                                                253
                                                                                                                                                  133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313
                       61
                                                                          41
                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                               1 GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys 180
              GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                              SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                  GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                     1.22e-119
970.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             372
                       80
                                                                          60
372
                                               312
                                                                                                 252
                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          492
                                  밁
                                                          á
                                                                                    밁
                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                         Query Match:
                                                                                                                                                                                                               Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-11-047-278-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음· 정
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 1
                                                                                     224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       161
                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
```

```
Sequence 1, Application US/11047278

Publication No. US20050196407A1

GENERAL INFORMATION:
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745

CURRENT FILING DATE: 2005-01-31

PRIOR APPLICATION NUMBER: US/01/970,076
PRIOR FILING DATE: 2001-10-03

PRIOR PILING DATE: 2001-10-03

PRIOR PILING DATE: 2001-12-05

NUMBER OF SEQ ID NOS: 10

SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: DNA
; ORGANISM: Homo sap;
; FEATURE;
; NAME/KEY: CDS
; LOCATION: (104)...(:
US-11-047-278-1
                                                                                                                                                                                                                                 US-09-970-076-2_COPY_41_227 (1-187)
                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 1414
                                                                   284 GÁAATCTÁTTACTTTGTGGAÁCÁGTTGGCTCACÁAATTCATCAGCCCACAGTTGAGAATG
41 SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                            GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                      GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleGluIleLeuAlaAlaGlu 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThralaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                           1.24e-119
970.00
100.00%
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                       x US-11-047-278-1 (1-1414)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             693
                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                  1414
187
0
0
0
                                                                                                              40
                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  140
                           60
                                                                   343
                                                                                                                                                      283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             492
```

```
APPLICANT: Young, John A.T.

APPLICANT: Bradley, Kenneth A.

APPLICANT: Bradley, Kenneth A.

APPLICANT: Collier, Robert J.

APPLICANT: Mogridge, Jeremy S.

TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745

CURRENT APPLICATION NUMBER: US/11/047,278

CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/99970,076
PRIOR FILING DATE: 2001-10-03
PRIOR PILING DATE: 2000-12-05

PRIOR FILING DATE: 2000-12-05

PRIOR PRIOR DATE: 2000-12-05

PRIOR PRIOR DATE: 2000-12-05

PRIOR PRIOR DATE: 2000-12-05

PRIOR PRIOR DATE: 2000-12-05

PRIOR PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05

PRIOR DATE: 2000-12-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
US-11-047-278-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
Ś
                                  문
                                                               á
                                                                                             US-09-970-076-2_COPY_41_227 (1-187) x US-11-047-278-9 (1-1436)
                                                                                                                                     Query Match:
DB:
                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 9, Application US/11047278 Publication No. US20050196407A1
                                                                                                                                                                                                                                                                                    NAME/KEY: CDS
LOCATION: (380)..(1033)
                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                      М
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         704
                                    263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                     GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
 GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IleGluIleLeuAlaAlaGlu 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTTGAAGAAGTCCTGC
                                                                                                                              1.27e-119
970.00
100.00%
100.00%
100.00%
100.00%
                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100
      40
                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                    밁
                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-133-937-58
   S
                                                                                                                                                      Query Match:
                                                                                                                                                                    Percent Similarity:
Best Local Similari
                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                        ; ORGANISM: Homo US-10-133-937-58
                                                                                                                                                                                                                                                                                                     SEQ ID NO 58
LENGTH: 1454
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 58, Application US/10133937
Publication No. US20030207278A1
GENERAL INFORMATION:
                                                                                                                                                                                                                         No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           803 ATCGAAATTCTAGCAGCTGAA 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                      264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                     Similarity:
     21 GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleGluIleLeuAlaAlaGlu
                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                    1.29e-119
970.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            187
                                                                                                                                                                                     Length:
Matches:
Conservative:
                                                                                                                                                      Mismatches:
Indels:
```

```
US-09-970-076-2_COPY_41_227 (1-187) x US-10-133-937-58 (1-1454)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Khan, Javed
APPLICANT: Ringner, Markus
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Meltzer, Paul
TITLE OF INVENTION: METHODS FOR ANALYZING HIGH DIMENSIONAL DATA FOR CLASSIFYING,
TITLE OF INVENTION: OTHER BIOLOGICAL STATES
TITLE OF INVENTION: OTHER BIOLOGICAL STATES
FILE REFERENCE: 11613.56US01
CURRENT APPLICATION NUMBER: US/10/133,937
CURRENT FILING DATE: 2002-11-04
NUMBER OF SEQ ID NOS: 99
SOFTWARE: Patentin version 3.1
                                   GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrAlaSerValllelleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                          1454
187
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           382
                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            742
40
                                            323
```

```
APPLICANT: Khan, Javed
APPLICANT: Ringner, Markus
APPLICANT: Ringner, Markus
APPLICANT: Peterson, Carsten
APPLICANT: Peterson, Carsten
APPLICANT: Meltzer, Paul
TITLE OF INVENTION: SELECTIONS OF GENES AND METHODS OF USING THE SAME FOR
TITLE OF INVENTION: DIAGNOSIS AND FOR TARGETING THE THERAPY OF SELECT CANCERS
FILE REFERENCE: 11613.56USI1
CURRENT APPLICATION NUMBER: US/10/159,563
CURRENT FILING DATE: 2002-12-09
PRIOR APPLICATION NUMBER: US 10/133,937
PRIOR APPLICATION NUMBER: US 10/133,937
PRIOR FILING DATE: 2002-04-25
NUMBER OF SEQ ID NOS: 444
SOFTWARE: Patentin version 3.1
SEQ ID NO 58
LENGTH: 1454
TYPE: DNA
ORGANISM: Homo Baplens
                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 12
US-10-159-563-58
                                                                                 US-09-970-076-2_COPY_41_227 (1-187)
                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 58, Application US/10159563 Publication No. US20040009154A1 GENERAL INFORMATION:
                                                                                                                                                                                                   No
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                       264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41
                                                  ,_
                                       GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              H1sGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                      GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleGluIleLeuAlaAlaGlu 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCGAAATTCTAGCAGCTGAA 824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCTTTATTGTTTTCTCCACCCGAGGAACCAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                      1.29e-119
970.00
100.00%
100.00%
100.00%
                                                                                   x US-10-159-563-58
                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                   (1-1454)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            623
                                                                                                                                                                                                                                                                             ; LENGTH: 1464
; TYPE: DNA
; ORGANISM: Homo s
US-10-201-292-31
                                                                                                                                                                                                                                                                                                                                                                          Sequence 31, Application US/10201292
Publication No. US20030144193A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Uddith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
                  ঠ
                                                  밁
                                                                              Ś
                                                                                                              US-09-970-076-2_COPY_41_227 (1-187)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                               Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-201-292-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version SEQ ID NO 31
                                                      133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                804 ATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 IleGluIleLeuAlaAlaGlu 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           324
                    21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                  GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                sapiens
                                                                                                                                                               1.31e-119
970.00
100.00%
100.00%
                                                                                                                 x US-10-201-292-31 (1-1464)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                824
                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                216
                                                                                                                                                                                                                                                                                                                                                                                                                                                Compositions and
                                                                                                                                                1464
187
0
0
```

160

743

140

120

563

623

100 503 80 443 60 383 40

밁 Ś 뮻 र् 문 ş 밁 á 밁 Ś 밁 र् 밁 र् 문 S 밁

В ঠ

```
Sequence 33, Application US/10201292

| Publication No. US20030144193A1 |
| GENERAL INFORMATION: APPLICANT: James B. ROTTMAN |
| APPLICANT: Theresa L. O'KEEFE |
| APPLICANT: Engin OZKAYNAK |
| APPLICANT: Engin OZKAYNAK |
| APPLICANT: JUDITH J. HEALEY |
| TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and FILE REFERENCE: 7853-253-99 |
| CURRENT APPLICATION NUMBER: US/10/201,292 |
| CURRENT FILING DATE: 2003-02-14 |
| NUMBER OF SEQ ID NOS: 36 |
| SOFTWARE: FastSEQ for Windows Version 4.0 |
| SEQ ID NO 33 |
| LENGTH: 1534 |
| TYPE: DNA |
| ORGANISM: Homo sapiens |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                        á
                                                      밁
                                                                              δ
                                                                                                          US-09-970-076-2_COPY_41_227 (1-187)
                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-201-292-33
 밁
                                                                                                                                                                                                                  Pred. No.:
                                                                                                                                                                                                                                                            US-10-201-292-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41
 193
                                                       133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                           21
                                                                                  н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerPheI1eValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLySLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LygAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                        GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
               GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet 40
                                                         GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                          1.4e-119
970.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      693
                                                                                                                x US-10-201-292-33 (1-1534)
                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                             1534
187
0
0
                                                                                                                                                                                                                                                                                                                                                                                                           and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    160
                                                          192
                                                                                       20
```

```
APPLICANT: James B. ROTTMAN

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Engin OZKAYNAK

APPLICANT: Judith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Met

FILE REFERENCE: 7853-253-99

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT PILING DATE: 2003-02-14

NUMBER OF SEQ ID NOS: 36

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 35

LENGTH: 1608
                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 15
US-10-201-292-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                 밁
                                                      Ś
                                                                                문
                                                                                                   8
                                                                                                                                                                                                                                                     ; TYPE: DNA
; ORGANISM: Homo
US-10-201-292-35
           S
                                                                                                                            US-09-970-076-2_COPY_41_227 (1-187)
                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 35, Application US/10201292 Publication No. US20030144193A1 GENERAL INFORMATION:
                                                                                                                                                                                                                   Мо.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                    193
                                                                                   133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41
            41
                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHi8SerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGAGAGGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                  ATCGAAATTCTAGCAGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                    GAAATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATG
                                                GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                          1.51e-119
970.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  187
                                                                                                                                  x US-10-201-292-35 (1-1608)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            693
                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                         1608
187
0
0
                                                                                                                                                                                                                                                                                                                                                                               Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          552
                                                              40
                                                                                       192
                                                                                                             20
                 60
                                         252
```

Search co Job time	D	δ	B	Ş	B	Ş	В	δ	DЬ	Ş	В	Ş	В	8	D.
omplet	673	181	613	161	553	141	493	121	433	101	373	18	313	61	253
Search completed: December 19, 2005, 02:10:22 Job time : 606.1 secs	ATCGAAATTCTAGCAGCTGAA 693	IleGluIleLeuAlaAlaGlu 187	GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC 672	ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys 180	ANAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCC 612	LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro 160	TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGGTG 552	SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal 140	ACAGCCAGCGTCATCATTGCTTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTAT 492	ThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr 120	CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG 432	HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg 100	CAPATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG 372	GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet 80	TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA 312

THIS PAGE BLANK (USPTO)

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run
                                                                                                                                                                                                                                                    Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -Q=(cgn2 1) USFTO 50970076/runat 14122005 111853 21065/app query.fasta 1.2410
-Q=(cgn2 1) USFTO 50970076/runat 14122005 111853 21065/app query.fasta 1.2410
-DB=Published Applications NA New -QFMT=fastap -SUFFIX=rnpbn -MINWATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=blts -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cd1 -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100
-THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=2000000000 -USER=US09970076 @CGN 1 1 675 @runat 14122005 111853 21065
-NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=0 -MAIT -DSPBLOCK=100
-LONGLOG -DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPDF=10 -XGAPEXT=0.5
-FGAPDP=6 -FGĀPEXT=7 -YGAPDP=10 -YGAPEXT=0.5 -DELDP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                               a a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9:
                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                  970
132.5
131
132
132
111.5
                                                                                                                                                                                                                             Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                             Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Published_Applications_NA_New:*

1: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*

2: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

5: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*

6: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                December 18, 2005, 07:41:36 ; Search time 150.899 Seconds (without alignments) 607.449 Million cell updates/sec
                                                                                                                                                                             100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BLOSUM62
                                                                                                                                                                                                                                                       Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4161431 segs, 245089505 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2_COPY_41_227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGFDLYFILDKSGSVLHHWN.....LQGIIHSILKKSCIEILAAE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cgn2_6/prodata/1/pubpna/US10_NEW_PUB.seq:*
cgn2_6/prodata/1/pubpna/US11_NEW_PUB.seq:*
cgn2_6/prodata/1/pubpna/US11_NEW_PUB.seq2:*
cgn2_6/prodata/1/pubpna/US11_NEW_PUB.seq3:*
                                                                                                                                                                                                                           Length
                                                                                                                          5540
4740
11447
                                                                                                                                                                                                                                                                                                                                                                                                                                         _6/ptodata/1/pubpna/US60_NEW_
                                                                                                                                                                                                                             멂
US-11-186-284-198

US-11-080-026-3

US-11-186-284-25

US-10-750-185-39040

US-10-821-234-182

US-10-131-826A-293

US-10-601-368-20

US-10-601-368-19
                                                                                                                                                                                                                             벙
                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7.05
Sequence 198, Appli
Sequence 3, Appli
Sequence 25, Appli
Sequence 3040, A
Sequence 182, App
Sequence 20, Appl
Sequence 20, Appl
                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      o o
```

## ALIGNMENTS

```
FILE REFERENCE: MPMO1-029P2RNM
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR FILING DATE: 2001-12-10
PRIOR FILING DATE: 2001-12-10
PRIOR FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-03-05
PRIOR PRICING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1
US-11-186-284-198
SEQ ID NO 198
LENGTH: 5540
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 198, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, K
TITLE OF INVENTION: METHODS FOR IDENTIFICATION,
TITLE OF INVENTION: THERAPY OF COLON CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Millennium Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Berger, Allison
Guillemette, Tra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Schlegel, Robert
Monahan, John E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kamatkar, Shubhangi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/11186284
o. US20050266493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tracy L.
                                                                                                                                                                                                                                                                                                                                                                                                                                KITS,
                                                                                                                                                                                                                                                                                                                                                                                                       ASSESSMENT,
                                                                                                                                                                                                                                                                                                                                                                                                       PREVENTION, AND
```

ORGANISM: Homo

Sapiens

```
Sequence 3, Application US/11080026

Publication No. US20050260192A1

GENERAL INFORMATION:

APPLICANT: Springer, Timothy A.

APPLICANT: Springer, Timothy A.

APPLICANT: Shimaoka, Motomu

APPLICANT: Shimaoka, Motomu

APPLICANT: Liu, Chafen

TITLE OF INVENTION: MODIFIED POLYPEPTIDES STITITLE OF INVENTION: DESIRED CONFORMATION ANI

FILE REFERENCE: CFBF-P02-021

CURRENT APPLICATION NUMBER: US/11/080,026

CURRENT FILING DATE: 2005-03-15

PRIOR APPLICATION NUMBER: 09/45,265

PRIOR APPLICATION NUMBER: US 60/229,700

PRIOR PILING DATE: 2000-09-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; NAME/KEY: CDS
; LOCATION: (144)...
US-11-186-284-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_41_227 (1-187) x US-11-186-284-198 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                RESULT 2
US-11-080-026-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Мо
:
                                                                                                                                                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    324
                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                              744
                                                                                                                                                                                                                                                                                                                                                                                                                              684
                                                                                                                                                                                                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   264 GGCGGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAAT
                                                                                                                                                                                                                                                                                                  804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 GluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleGluIleLeuAlaAlaGlu 187
||||||||||||||||||||||
aTCGAAATTCTAGCAGCTGAA 824
                                                                                                                                                                                                                                                                                                                                                                                    ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                LysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAGCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATGAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAA
                                                                                                                                                                                                                                                                                                                                                                GTGAATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.94e-117
970.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                      STABILIZED IN A AND METHODS FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0000
                                                                                                                           PRODUCING SAME
                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40
                                                                                                                                                                                                                                                                                                                                                                                                                                   743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
```

```
Sequence 25, Application US/11186284

Publication No. US20050266493A1

GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals, In
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: METHODS FOR IDENTIFI

TITLE OF INVENTION: METHODS FOR IDENTIFI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_41_227 (1-187) x US-11-080-026-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-11-080-026-3
                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                        닭
                                                                                                                                                                                                                                           US-11-186-284-25
                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 4740
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                   1015 GTGAATAAC---TTTGAGGCTCTGAAGACCATTCAGAACCAGCTTCGGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   520 GACATTGCCTTCTTGATTGATGGCTCTGGTAGCATCATCCCACATGACTTTCGGCGGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       625 ACCTTGTTCTCT------TTGATGCAGTACTCTGAAGAATTCCGGATTCAC
                                                                                                                                                                                                                                                                                                                                  161 ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLys 178
                                                                                                                                                                                                                                                                                                                                                                                                            148 LeuAlaArg------IleAlaAspSer----LysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      110 AspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  784 CTGTTTAACATCACCAACGGAGCCCGAAAGAATGCCTTTAAGATCCTAGTTGTCATCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43 IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAsp------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAG------GGAGTCATTCGCTACGTCATTGGGGTGGGAGATGCCTTCCGCAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AspLeuTyrPheIleLeuAspLysSerGlySerValLeu---HisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGCTGCTT-----GGGCGGACACACACGGCCACGGGCATCCGCAAAGTGGTACGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTACCTTCAAAGAGTTCCAGAACAACCCTAACCCAAGATCACTGGTGAAGCCAATAACG
                                                                                                                                                                                                                                                                                                                                                                          AAATCCCGCCAAGAGCTTAATACCATCGCATCCAAGCCGCCTCGTGATCACGTGTTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GÁTGGÁGAAAAGTTTGGCGÁTCCCTTGGGATÁTGAGGATGTCATCCCTGÁGGCÁGACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.49e-06
132.50
46.97%
26.26%
13.66%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----ArgGluGlnIleArgGlnGlyLeuGluGluLeuGln
     COMPOSITIONS, KITS, AND IDENTIFICATION, ASSESSMENT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----GTGATGGAGCAATTAAAAAAGTCCAAA 624
           PREVENTION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             579
                                                                                                                                                                                                                                                                                                                                                                                1014
                                                                                                                                                                                                                                                                                                                                                                                                                  160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22
                                                                                                                                                                                                                                                                                                                                                                                                                                                        954
```

```
밁
                                               ş
                                                                                  밁
                                                                                                                S
                                                                                                                                                   밁
                                                                                                                                                                                δ
                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                           뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_41_227 (1-187) x US-11-186-284-25 (1-11447)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR PRILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR FILING DATE: 2002-05-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: FASTS
SEQ ID NO 25
LENGTH: 11447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: CDS
LOCATION: (1)...(9192)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE: MPM01-029P2RNM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OF INVENTION: THERAPY OF COLON CANCER
                                                                                                                                                     1708
                                                                                                                                                                                                                                                                                         1603
                                                                                                                                                                                                                                                                                                                                                          1543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1318
                                                                                                                                                                                                                                                                                                                                                                                            76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FastSEQ for Windows Version 4.0
                 TCTTTTGAACTCACACAGTCTATCTGCCTTAGAATTGAGCAAGAATTGGCAGCT 1878
                                                                                                                                                   GAAATCTTTGCAGTTGGTGTGAAGGATGCCGTTCGCTCAGAATTGGAAGCTATTGCCTCT 1767
                                                                                                                                                                          IleValTyrCysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAsp 153
                                                                                                                                                                                                                                                    HisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAla 133
                                                                                                                                                                                                                                                                                       AAG---GGATCAAGAAGCAATGTGCCAAAGGTCATGATTCTTATCACGGATGGGAAA---
                                                                                                                                                                                                                                                                                                                       ArgGlnGlyTyrArgThr-----AlaSerValIleIleAlaLeuThrAspGlyGluLeu 113
                                                                                                                                                                                                                                                                                                                                                        GGATCTACAAATACTGGCAAAGCAATGACTTATGTCAGAGAGAAAATATTTGTGCCTAGC 1603
                                                                                                                                                                                                                                                                                                                                                                                                                           GTTGAAGATATAATT------GAAGCAATAAACACCTTCCCTTACAGAGGA 1542
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuPro-----Gly 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerPheIleValPheSerThr-----ArgGlyThrThrLeuMetLysLeuThrGlu 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAGCCTTTTTGGAAGTTCTTGTAAAAAGTTTTGAAATTTCACCAAATAGGGTCCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMet 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATATTGTGTTTTTGGTTGATGGCTCCTATAGCATTGGGATTGCAAACTTTGTTAAAGTT 1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                 IleHisSerIleLeuLysLysSerCysIleGluIle-----LeuAlaAla 186
                                                                                                         -----SerLysAspH1sValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIle
                                                                                                                                                                                                                      TCATCAGATGCTTTC-----AGAGATCCTGCGATAAAACTGAGGAATTCAGATGTT 170
                                                                                                                                                                                                                                                                                                                                                                                      GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTCTTGTGCAATACAGCCGGGATCCTCATACTGAGTTCACTTTGAAAAAATTCACCAAA 1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2.02e-05
131.00
48.99%
29.80%
13.51%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                    TTTGATGCTTTTCAGAGGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       59
38
75
26
                                                                                                                                                                                                                                                                                       1656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22
                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                             밁
                                                               Ś
                                                                                                  밁
                                                                                                                           S
                                                                                                                                                                   맑
                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA
; ORGANISM: Bovine
US-10-750-185-39040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 39040
LENGTH: 2834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: MMI GENOMICS, INC. APPLICANT: DENISE, Sue K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
..
                                   1672
 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DeNISE, Sue K.
KERR, Richard
ROSENFELD, David
HOLM, Tom
BATES, Stephen
eLeuLysLysSerCys 180
                                                                                                                                                                     CCCGGTG--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.03e-05
122.00
50.00%
29.03%
12.58%
```

```
US-10-750-185-39040/c
, Sequence 39040, Application US/10750185
, Publication No. US20050260603A1
, GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-2_COPY_41_227 (1-187) x US-10-750-185-39040 (1-2834)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: MMI1100-2
CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR FILING DATE: 2002-12-31
NUMBER OF SEQ ID NOS: 64922
SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: BATES, Stephen
APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1944 CACTCCAGTGTGGCAGGGCTTGGAGGTAGCCGTTGACAGCATCCAGCAG-----AAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2061 GCGATGAAGGTGTTCATGAATGAGGTGATAAAGATGTTCCACGTTGGACCGGAC---AGA
                                                                                                                                                   lTyrCysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLy 155
                                                                                                                                                                                                                                                                          uAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleVa 135
                                                                                                                                                                                                                                                                                                                                                                               nArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGl 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             yGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAs 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MetSerPheIleVal-PheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspAr 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---IleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerProGlnLeuArg
-GACAGAATGTTTTTCGTGCATGAT---TTTGAGTCCTTGAAGACCATCCAACAAGAAGT 1617
                                                 sAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIl 175
                                                                                                           TTATGCAGTTGGAGTCAGAGATGCTAATATTGCTGAGCTTCAAGAGATTGCTGAA-----
                                                                                                                                                                                                                                                                                                                                 TGCTCGCAGCAA-CGTGCCTT-GGTATCTCATTTGTTGTCACTGACGGCCAATCTATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGGGGCACCAAGATGGGTGAGGCCCTG---GGCAGCATGATCCAGGTCTTTGCAGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gGluGlnIleArgGlnGlyLeuGlu------GluLeuGlnLysValLeuProGl 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19866880867914
                                                                                                                                                                                                                      -GCTGATGCTGCÁGAGGCGCTGÁGGGGCCATGGÁGTCACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2834
54
39
71
24
                                                                                                                                                                                                                         1728
                                                                                                                                                                                                                                                                                                                                    1776
                                                                                                                                                                                                                                                                                                                                                                                                                                               1834
                                                                                                             1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          39
```

```
á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
र्
                                                                         S
                                                                                                                  밁
                                                                                                                                                       5
                                                                                                                                                                                              밁
                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_41_227 (1-187) x US-10-821-234-182 (1-2501)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-821-234-182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-821-234-182/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 182, Applic Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: pt_SEQ_genes Version 1.0
SEQ ID NO 182
LENGTH: 2501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR FILING DATE: 2003-04-07
NUMBER OF SEQ ID NOS: 1704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Tang, Y. Tom
TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Labat, Ivan APPLICANT: Stache-Cra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: 821A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                              1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1499 ACAGGAGCCAAAAAGTGTCTAGTCAACTTAATTGAGAAGGTGGCAAGTTATGGTGTGAAG 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1616 GGTACAAGACATCTGT 1601
                                                                                                                                                                                                1223
                                                                                                                                                                                                                                                                                                                                                                                                                                     1385 TCTGAAGCAGACAGCAGTAATGCAGACTGGGTCACGAAGCAGCTCAATGAAATCAATTAT 1320
                                                                                                                                                                                                                                       100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16 LeuHisHisTrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GlyGlyPheAspLeuTyrPheIleLeuAspLysSerGlySerVal--------
                                                                                                                                                                                                                                                                                                                                                          GAAGACCACAAGTTGAAGTCAGGGACTAACACC----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCA----AGATATGGTCTAGTGACATATGCCACATACCCCAAAATTTGGGTCAAAGTG
GluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGly 164
                                                                                                                                                                                                                                   ArgThrAlaSerValileIleAlaLeuThrAspGly-----
                                                                                                                                                                                                                                                                              CTCCAGGCAGTGTACAGCATGATGAGCTGGCCAGATGACGTCCCTCCTGAAGGCTGGAAC 1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrGlu-----AspArgGluGlnIleArgGlnGlyLeuGluGluLeu-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProGlnLeuArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCTCCATGAACATCTACCTGGTGCTAGATGGATCAGACAGCATTGGGGGCCAGCAACTTC 1500
                                                                                                                      ATTACTGTCATTGATGAGATCCGGGACTTGCTATACATTGGCAAGGATCGCAAAAACCCA 1104
                                                                                                                                                                                                CGCACCCGCCATGTCATCATCCTCATGACTGATGGATTGCACAACATGGGCGGGGACCCA 116
                                                                                                                                                                                                                                                                                                                 SerGluGlnIleTyrTyrGluAsnArg------GlnGlyTyr---
                                                                                                                                                                                                                                                                                                                                                                                            -----GlnLygValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAla
                                      AGGGAGGATTATCTGGATGTCTATGTGTTTTGGGGTCGGGCCTTTGGTGAACCAAGTGAAC 1044
                                                                         ArgSerArgAspLeuGlyAlaIleValTyrCysValGly-----ValLysAspPheAsn 144
                                                                                                                                                         -----GluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsn 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Stache-Crain,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Andarmani,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/10821234 o. US20050255114A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.000824
111.50
43.26%
22.79%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Susan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Birgit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2501
49
44
77
10
                                                                                                                                                                                                                                                                                                                                                            ----AAGAAGGCC 1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1386
                                                                                                                                                                                                                                         111
                                                                                                                                                                                                                                                                                                                     99
                                                                                                                                                                                                                                                                                                                                                                                                   87
```

```
ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
US-10-131-826A-293
US-09-970-076-2_COPY_41_227 (1-187) x US-10-131-826A-293 (1-3449)
                                                              Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                             US-10-131-826A-293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 293, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION
                                                                                                                                                                                                                                                                                         SEQ ID NO 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C128
CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
PRIOR APPLICATION NUMBER: 60/049911
PRIOR APPLICATION NUMBER: 60/056974
PRIOR APPLICATION NUMBER: 60/056974
PRIOR APPLICATION NUMBER: 60/059113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Baker, Kevin
                                                                                                                                                                                                                                                                                                            Remaining Prior Application data removed - See File Wrapper or PALM NUMBER OF SEQ ID NOS: 550
                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/059184
PRIOR FILING DATE: 1907-00 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/059122
PRIOR FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/059588
                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/059117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                    LENGTH: 3449
                                                                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1043 ATCAATGCTTTGGCTTCCAAGAAAGACAATGAGCAACATGTGTTCAAAGTCAAGGAT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  986 ATGGAAAACCTGGAAGATGTTTTCTACCAAATGATCGATGAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSer 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Watanabe, Colin K
Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stewart, Timothy A
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Godowski, Paul J. Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Beresini, Maureen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/10131826A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zhang, Zemin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Deforge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US20050245730A1
                                                                                                                                                                                                                                                                                                                                                      1997-09-19
                                                0.00284
109.00
46.35%
23.96%
11.24%
                                                                 Conservative: Mismatches: Indels:
                                                                                                                             Length:
Matches:
```

S

4 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle 22

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-601-368-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                          Alignment Scores:
                                                                                                                                                                US-10-601-368-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20, Application US/10601368
Publication No. US20050260702A1
GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 20
                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT FILE REFERENCE: 0734-27501 CURRENT APPLICATION NUMBER: US/10/601,368 CURRENT FILING DATE: 2003-06-23 PRIOR APPLICATION NUMBER: US/09/561,263A PRIOR FILING DATE: 2000-04-27 PRIOR APPLICATION NUMBER: US 09/322,790 PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                            FEATURE:
NAME/KEY: CDS
LOCATION: (1)...(3564)
                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                          LENGTH:
                                                                                                             <u>8</u>
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         131 LeuGlyAlaIleValTyrCysValGlyVal-----LysAspPheAsnGluThrGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 76
                                                                                                                                                                                                                                                                        3564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGACGCTGACCTCCGTGTTCCAGAAGAAGTTGTGC 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnGlyIleIleHisSerIleLeuLysLysSerCys 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACGGGCATCCTAATCTTTGCCATTGGTGTGGGGCAGGTAGACTTCAACACCTTGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGAGGGGGCCCCGGCCCCTGAGGGAGAATGTGCCACGGGTCATAATGATCGTGACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ArgGlnGlyTyrArg------ThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCAAGAGGAAGTCCGAGGTGGAGCGTGCTGTCAAGAGGATGCGGCATCTGTCCACGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCCTGCTCCAATAT------GGCAGCACTGTCAAGAATGAGTTCTCCCTCAAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGGAGTTCATCGTGGACATCTTGCAATTCTTGGACATTGGTCCTGATGTCACCCGAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTGGGAGTGAGCCCCATGAGGACCATGTCTTCCTTGTGGCCAAT---TTCAGCCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCATGACTGGGCTGGCCATCCAGTAT------GCCCTGAACATCGCATTCTCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ThrGluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerPheIleValPheSerThrArgGlyThrThrLeu------MetLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TyrTyrPhe----ValGluGlnLeuAlaHisLysPheIleSerProGlnLeu----ArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAGACCTCAGGACTCCGTG-------GCCGAGGTGGCTGCTAAGGCACGGGAC
                  0.00404
108.00
38.38%
24.24%
11.13%
                                Length:
Matches:
Conservative:
Mismatches:
Indels:
             Gaps:
                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AND
                  3564
48
28
84
38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
US-10-601-368-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
Percent Similarity:
Best Local Similarity:
                                     Score:
                                                        Pred.
                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_41_227 (1-187) x US-10-601-368-20 (1-3564)
                                                                                                           US-10-601-368-19
                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                      SEQ ID NO 19
                                                                                                                                                                                                                                                 TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THERBOF FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR PELICATION NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                  LENGTH: 4858
TYPE: DNA
                                                                                                                          NAME/KEY: CDS
LOCATION: (28)...
                                                                                                                                                              ORGANISM: Mus
FEATURE:
                                                      No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              607 ATAGTCCAGTATGGAGAAGATGCCGTCCATGAGTTCCACCTT---AATGACTACAGGTCT 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    490 GACATCGTCATTGTTAGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTCCAA 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        724 ACGGCATTTGGCATTGAATTTGCACGCTCGGAGGCTTTCCAGAAGGGTGGAAGAAAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24 TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----AAGGACATTGTTGATGCCCTTGGGGACAGGATCTTCAGCTTGGAAGGC 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspSerLysAspHisvalPheProValAsnAspGlyPheGlnAlaLeuGlnGly 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CysValGlyValLysAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCAAG-----AAAGTGATGATTGTCATCACGGACGGGGAATCCCACGACAGCCCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            :::|||:::
CACTTCCTCATCAATATCCTCAAAAAGTTCTACATTGGCCCCGGCCAGATCCAGGTCGGA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCGCCAGCGACCCTGACGACAAGCACTTCTTCAACGTCACAGATGAGGCGGCCCTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGGCTACTACAACCGCAGGGGGATCAATCCAGAGACTTTTCTAAATGAAATCAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGAGAAGGTGATCCGGCAGAGCGAGAAGGACAACGTGACCAGATACGCTGTGGCCGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                 musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                         Jose M.
                                                                                                                            (3591)
0.00638
108.00
38.38%
24.24%
Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -PheAsnGluThrGlnLeuAlaArgIleAla
```

957

897 116 837

116 783 98

81

422

70

50 362

536

90

482

```
Query
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2_COPY_41_227 (1-187) x
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
        Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
US-10-995-561-464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                Score:
                                                            Percent Similarity:
                                                                                                Pred. No.:
                                                                                                               Alignment Scores:
                                                                                                                                                 US-10-995-561-464
                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RES
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CLOO1559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 464
                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 464, Appublication No.
                                                                                                                                                               LENGTH: 3175
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           811 GCCAAG-----AAAGTGATGATTGTCATCACGGACGGGAATCCCCACGACAGCCCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     634 ATAGTCCAGTATGGAGAAGATGCCGTCCATGAGTTCCACCTT---AATGACTACAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24 TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACTTCCTCATCAATATCCTCAAAAAGTTCTACATTGGCCCCGGCCAGATCCAGGTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACATCGTCATTGTCTTAGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTCCAA 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACGGCATTTGGCATTGAATTTGCACGCTCGGAGGCTTTCCAGAAGGGTGGAAGAAAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CysValGlyValLysAsp------PheAsnGluThrGlnLeuAlaArgIleAla 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGAGAAGGTGATCCGGCAGAGCGAGAAGGACAACGTGACCAGATACGCTGTGGCCGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCGCCAGCGACCCTGACGACAAGCACTTCTTCAACGTCACAGATGAGGCGGCCCTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGGGCTACTACAACCGCAGGGGGATCAATCCAGAGACTTTTCTAAATGAAATCAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                            Application US/10995561
o. US20050272054A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -AAGGACATTGTTGATGCCCTTGGGGACAGGATCTTCAGCTTGGAAGGC 1089
            0.00397
107.50
40.28%
23.15%
11.08%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . 13%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-601-368-19
        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels:
                                                                                                                                                                                                                                                                                                                                           AND DRUG RESPONSE,
            3175
50
37
84
45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (1-4858)
                                                                                                                                                                                                                                                                                                                                               METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
          Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_41_227 (1-187) x US-10-995-561-464 (1-3175)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                  Score
                                                                                                  Alignment Scores:
                                                                                                                                    US-10-995-561-465
                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-995-561-465
                                                                                                                                                                                                 FILE REFERENCE: CL001559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 465
                                                                                                                                                                                                                                                                                                                                                                             Sequence 465, Application No. US200 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                         APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RE
TITLE OF INVENTION: DETECTION AND USES THEREOF
                                                                                                                                                    TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                     LENGTH: 3464
                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  243 GTGTÄCTTCGTGCTGGÄCACCTCGGAGÄGCGTCACCATGCAGTCCCCCACGGACATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              819 AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      759 ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATCAAGGTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            651 GAGGGCATCCGGCTCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuTyrPheIleLeuAspLysSerGlySerVal----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuGlyAlaIleValTyrCysVal-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGACCAGGTGGCGCTGAGCTGGCGCCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerProGlnLeuArgMetSerPhe------IleValPheSerThrArgGlyThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTTCCGCCGCGC-----ACCTTCACCGACTGCGCGCTGGCCAACATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACATCGCCAGCACGCCGCACGAGCTCTACCGC------AACGACTACGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCCACGTCACCGGCAGCCCCTGCGGGGGCATCAAGCTGCAGGCCGAGCGGGCCCGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                               Application US/10995561
                                                                                                                                                                                                                                                                                                                                                                                                 US20050272054A1
                                                                                                                                                      sapiens
0.00451
107.50
40.28%
23.15%
11.08%
              Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysLysSerCysIleGluIle 183
```

-----GlyvalLys

141 650 130 590 110

159

710

176 758

3464 37 38 45

RESPONSE,

METHODS

읶

```
Sequence 466, Application US/1099561

Publication No. US20050272054A1

GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESTITLE OF INVENTION: DETECTION AND USES THEREOF PILE REFERENCE: CL001559

CURRENT APPLICATION NUMBER: US/10/995,561

CURRENT PILING DATE: 2004-11-24

NUMBER OF SEQ ID NOS: 85702

SOFTWARE: FRANCE OF WINDOWS Version 4.0

SEQ ID NO 466

TYPE: DIA OF SEC ID NOS: SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID NO 4669

TYPE: DIA OF SET ID N
  Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 11
US-10-995-561-466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2_COPY_41_227 (1-187) x US-10-995-561-465 (1-3464)
                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                           US-10-995-561-466
                                                                                                                                                                                                                                      ORGANISM: Homo
                                                                                                                       Хо
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16 LeuHisHisTrpAsnGlu---IleTyrTyrpheValGluGlnLeuAlaHisLyspheIle 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ហ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGGGCATCCGGCTCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGCCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerProGlnLeuArgMetSerPhe------IleValPheSerThrArgGlyThr 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGTACTTCGTGCTGGACACCTCGGAGAGCGTCACCATGCAGTCCCCCACGGACATCCTG 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuTyrPheIleLeuAspLysSerGlySerVal------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGCTGCCYGACTCCACCGAGATCRACCÁGGACACCÁTCAACCGCÁTCATCAAGGTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACATCGCCAGCACGCCGCACGAGCTCTACCGC-----AACGACTACGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCCACGTCACCGGCAGCCCCTGCGGGGGCATCAAGCTGCAGGCCGAGCGGGCCCGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArqSerArqAsp 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCCGGCAGGACCGCAGCAAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTTCCGCCGCGGC----ACCTTCACCGACTGCGCGCTGGCCAACATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGln 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----LγsLysSerCysIleGluIle 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAsp 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGACCAGGTGGCGCTGAGCTGGCGCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG 422
                                                                                                                                                                                                                                   sapiens
  0.00452
107.50
40.28%
23.15%
11.08%
Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -ACCGTCCACTTCGCCGTGGTCATCACCGAC
  3468
50
37
84
45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESPONSE, METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ဝ္
; SOPTWARE: PatentIN version 3; SEQ ID NO 56394; LENGTH: 1325; TYPE; DNA; ORGANISM: Bovine 198668805US-10-750-185-56394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 12
US-10-750-185-56394
; Sequence 56394, Application US/10750185
; Publication No. US20050260603A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                     APPLICANT: KERR, Richard
APPLICANT: ROSENFELD, David
APPLICANT: HOLM, Tom
APPLICANT: BATES, Stephen
APPLICANT: BATES, Stephen
APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRI
FILE REFERENCE: MMILION-2
CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT FILING DATE: 2003-12-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_41_227 (1-187) x US-10-995-561-466 (1-3468)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: MMI GENOMICS, II
APPLICANT: DENISE, Sue K.
APPLICANT: KERR, Richard
                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR FILING DATE: 2002-12-31
NUMBER OF SEQ ID NOS: 64922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            651 GAGGGCATCCGGCTCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               131 LeuGlyAlaIleValTyrCysVal-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCCACGTCACCGGCAGCCCCTGCGGGGGCATCAAGCTGCAGGCCGAGCGGGCCCGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCCGGCAGGACCGCAGCAAGGGC-----ACCGTCCACTTCGCCGTGGTCATCACCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTTCCGCCGCGGC-----ACCTTCACCGACTGCGCGCTGGCCAACATGACGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACCAGGTGGCGCTGAGCTGACGCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGTACTTCGTGCTGGACACCTCGGAGAGCGTCACCATGCAGTCCCCCACGGACATCCTG 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACATCGCCAGCACGCACGAGCTCTACCGC------AACGACTACGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATCAAGGTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAsp
                             19866880505724
                                                                                                                                                                                                                                                                                                                                                  FOR INFERRING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysLysSerCysIleGluIle
                                                                                                                                                                                                                                                                                                                                                  BOVINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ------GlyvalLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                966
```

110

536

141

710

130 590

650

90

70

밁 र् 밁 Ş 밁 á 밁 ঠ 밁 ঠ 밁 र् 문 ঠ 밁 ş 밁 र् 문 Ś 밁 ঠ

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                         US-10-601-368-2

US-10-601-368-2

; Sequence 2, Application US/10601368

; Publication No. US20050260702A1

; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-2_COPY_41_227 (1-187) x US-10-750-185-56394 (1-1325)
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores
                                          APPLICANT: LOYA, JOSE M.

TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR PILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOPTWARE: FABESEQ for Windows Version 3.0
SEQ ID NO 2266
                                                                                                                                                                                                                                 APPLICANT: Pan, Yang APPLICANT: Lora, Joi
TYPE: DNA
ORGANISM: Homo sapiens
                                  LENGTH: 3564
                                                                                                                                                                                                                                                                                                                                                                   990
                                                                                                                                                                                                                                                                                                                                                                                                  169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 543 AAGGAGTTCATTGTGGACATCCTGCAGTTCTTGGACATTGGCCCTGACGTCACCCGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 483 GACGTGGTCTTTATCATTGACAGCTCACGCAGCGTCAACACCCCACGACTACGCAAAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23 TyrTyrPhe---ValGluGlnLeuAlaHisLysPheIleSerProGlnLeu---ArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCAAGAGGAAGTCCGAGGTGGAGCGTGCCGTCAAGAGGATGCGGCATCTGTCCACGGG
                                                                                                                                                                                                                                                                                                                                                                GAGACGCTGACCTCAGTGTTCCAGAAGAAGTTGTGC
                                                                                                                                                                                                                                                                                                                                                                                               GlnGlyIleIleHisSerIleLeuLysLysSerCys 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGGCATCCTGATCTTTGCCATCGGTGTGGGCCCAGGTGGACTTCAACACGCTGAAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuGlyAlaIleValTyrCysValGlyVal-----LysAspPheAsnGluThrGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGAGGGGGCCCCCTGAGGGAGAATGTGCCTCGGGTCATAATGATCGTGACTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgGlnGlyTyrArg-----ThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCATGACGGGGCTGGCCATCCAGTAC------GCCCTGAACATCGCCTTCTCGGAA 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTCTGCTCCAGTAT-----GGCAGCACGGTCAAGAACGAGTTCTCCCTCAAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTGGGAGCGAGCCCACGAGGACCACGTCTTCCTGGTGGCCAAC---TTCAGCCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.00128
107.00
46.35%
23.44%
11.03%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                     1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                                                                    989
                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                     뭉
                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score:
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_41_227 (1-187) x US-10-601-368-2 (1-3564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-601-368-2
                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
US-11-000-463-574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                         Sequence 574, Application US/11 Publication No. US20050266423A1
                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT: Zhang, jie
APPLICANT: Zhou, Ping
APPLICANT: Cao, yi-Cheng
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: Novel Nucleic Acids at
FILE REFERENCE: 785CTP4CN
CURRENT APPLICATION NUMBER: US/11/000,463
                                                                                                                                                                                                                                                                   APPLICANT: Tang, Y Tom
APPLICANT: Liu, Chenghua
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: CDS
LOCATION: (1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               490 GACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           153 AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     137 CysValGlyValLysAsp------PheAsnGluThrGlnLeuAlaArgIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           117 LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       838 CTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGATATGCGGTGGCCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             784 GCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCCCACGACGACCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           664 GTAAAAGATGTGGTGGAAGCTGCCAGCCACATTGAGCAGAGAGGAGGAACAGAGACCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 607 GTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---AACGACTACAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       547 CACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGGCAGATCCAGGTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99 TyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82 GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 IleArgGlnGlyLeuGluLeuGlnLyeValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24 TyrpheValGluGlnLeuAlaHisLysphe---IleSerpro---GlnLeuArgMetSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           42 PhelleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4 AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGATGAGGCTGCCTTG---
                                                                                                                                                                           Chen, Rui-hong
Qian, Xiaohong
Wang, Zhiwei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGCTACTACAACCGCAGGGGGATCAATCCAGAAACTTTTCTAAATGAAATCAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (1) ... (3564)
                                                                                                                                                    Wehrman, Tom
                                                                                                                                                                                                                                            Asundi, Vinod
                                                                                                                                                                                                                                                                                                                                                              Application US/11000463
                                                                                                                                                                                                                                                                                                                                                                                                                                                      - AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGCCTGGAAGGC 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.0137
104.00
38.38%
24.24%
10.72%
                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                and
                                                Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      116
```

CURRENT FILING

DATE:

```
US-09-970-076-2_COPY_41_227 (1-187) x US-11-000-463-574 (1-3967)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION UNMBER: 10/291,265
PRIOR FILING DATE: 2002-11-08
PRIOR PPLICATION UNMBER: ECT/US01/02623
PRIOR APPLICATION UNMBER: DY/US01/02623
PRIOR APPLICATION UNBER: 09/922,279
PRIOR APPLICATION UNMBER: 09/922,279
PRIOR APPLICATION UNMBER: 09/491,404
PRIOR FILING DATE: 2000-01-25
PRIOR APPLICATION UNMBER: 09/617,746
PRIOR APPLICATION UNMBER: 09/617,746
PRIOR APPLICATION UNMBER: 09/631,451
PRIOR APPLICATION UNMBER: 09/631,451
PRIOR APPLICATION UNMBER: 09/631,451
PRIOR FILING DATE: 2000-08-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: FastSEQ for Windows Version SEQ ID NO 574 LENGTH: 3967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 09/633,870 PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    596 CACTICCTCATCATCATCCTGAAAAAGTTTTACATTGGCCCAGGGCAGATCCAGGTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24 TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr 23
                                                                                                                                                        CysValGlyValLysAsp-------PheAsnGluThrGlnLeuAlaArgIleAla
                                                                                                                                                                                                                                                                                                                        CTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGATATGCGGTGGCCGTC 946
                                                                                                                                                                                                                                                                                                                                                                                                                    GCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCCCACGACAGCCCAGAC 886
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---AACGACTACAGGTCT 712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTTCAG
                                                                       AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly 170
                                                                                                                                                                                                                                                                   LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis 81
                                                                                                                                                                                                                        ĊTĠĠĠĊŦĂĊŦĂĊĂĂĊĊĠĊĂĠĠĠĠĠAŦĊĂĂŤĊĊĀĠĂĂĂĊŦŦŦŦĊŤĂĂĂŦĠĄĂĂŤĊĂĂĂŤĂĊ
                           NAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGCCTGGAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.016
104.00
38.38%
24.24%
10.72%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2004-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3967
48
28
84
38
                                                                                                                                                                                                                        1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 3969
; TYPE: DNA
; ORGANISM: Homo BA
; PEATURE:
; NAME/KEY: CDS
; LOCATION: (52)...(
US-11-000-463-102
                                                                       밁
                                                                                                                     Ś
                                                                                                                                                                       밁
                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2_COPY_41_227 (1-187) x US-11-000-463-102 (1-3969)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-11-000-463-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2002-11-08
PRIOR APPLICATION NUMBER: PCT/US01/02623
PRIOR PILING DATE: 2001-01-25
PRIOR PILING DATE: 2001-08-09
PRIOR FILING DATE: 2001-08-09
PRIOR FILING DATE: 2001-08-03
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR PILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR PILING DATE: 2000-01-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Tang, Y Tom
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Chen, Rui-hong
APPLICANT: Qian, Xiaohong B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Fa
SEQ ID NO 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 102, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Zhou, Ping
APPLICANT: Cao, Yi-Cheng
APPLICANT: Dramac, Radoje T.

APPLICANT: Dramac, Radoje T.

TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides
FILE REFERENCE: 785CIP4CN
CURRENT APPLICATION NUMBER: US/11/000,463

CURRENT FILING DATE: 2004-11-29

FRIOR APPLICATION NUMBER: 10/291,265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 09/631,451
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Мо
:
                                                                                                                                                                                                                                                                        598 CACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGGCAGATCCAGGTTGGA
                                                                                                                                                                                                                                                                                                                                                                    541 GÁCATCGTCATTGTCCTGGÁTGGCTCCAACÁGCATC---TACCCCTGGGTGGÁGGTTCAG
                                                                         715 GTAAAAGATGTGGTGGAAGCTGCCAGCCACATTGAGCAGAGAGGAGGAACAGAGACCCGG
                                                                                                                                                                     658 GTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---AACGACTACAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION:
82 GluGlyPheGlu------ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly
                                                                                                                       62 IleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                   42 PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                   24 TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer 41
                                                                                                                                                                                                                                                                                                                                                                                                                  4 AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qian, Aluei
Wang, Zhiwei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wehrman, To
Zhang, Jie
Zhou, Ping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/11000463 b. US20050266423A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.016
104.00
38.38%
24.24%
10.72%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₽.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative: Mismatches: Indels:
```

Percent Similarity: Best Local Similarity:

; TYPE: DNA ; ORGANISM: Homo US-11-000-463-574

sapiens

NUMBER OF SEQ ID NOS:

Alignment Scores:

밁 र् 밁 ફ 밁 र् 밁 र् 밁 ş 밁 श 밁 8 밁 ঠ 밁 ş 밁 ঠ

1007

774

81

61 657

117 947

887

773

82

99

713

656

539

)	밁	Ş	F	ठ	문	Ş	밁	ঠ	皮	Ş	문
•	1066	153	1009	137	949	117	889	116	835	99	775
	AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGCCTGGAAGGC 1113	153 AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly 170	1009 ATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGATGAGGCTGCCTTG 1065	137 CysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAla 152	CTGGGCTACTACAACCGCAGGGGGATCAATCCAGAAACTTTTCTAAATGAAATCAAATAC 1008	117 LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 136	889 CTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGATATGCGGTGGCCGTC 948	116	GCCAAGAAGGTGATGATTGTCATCACAGATGGGGAGTCCCACGACAGCCCAGAC 888	99 TyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp 116	775 ACGGCATTTGGCATTGAATTTGCACGCTCAGAGGCTTTCCAGAAGGGTGGAAGGAA

Search completed: December 19, 2005, 02:30:25 Job time : 166.899 secs

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88
              141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
141.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        seg length: 0 seg length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Issued_Patents_AA:*
1: /cgn2_6/ptodata/1/iaa/5_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/6_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/H_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_42_222
943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       572060 seqs, 82675679 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 December 14, 2005, 11:02:37; Search time 16.3226 Seconds
              157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
157.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GFDLYFILDKSGSVLHHWNE......DGFQALQGIIHSILKKSCIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
              GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멾
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapext 0
       US-10-104-047-2639
US-08-286-889-37
US-08-485-618-37
US-08-605-672-37
US-08-605-672-37
US-08-943-363-37
US-09-9193-043-37
US-09-9193-043-37
US-09-9193-043-55
US-08-485-618-55
US-08-485-618-55
US-08-485-618-55
US-08-913-363-55
US-09-913-043-55
US-09-130-043-55
US-09-130-043-55
US-09-130-043-68-889-46
US-08-286-889-46
US-08-286-889-46
US-08-913-363-46
US-08-93-363-46
US-09-130-043-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (without alignments)
916.781 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     572060
Sequence 2639, Ap
Sequence 37, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 55, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
Sequence 46, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Description
```

RESULT US-08- ; Sequ ; Pate ; GEN ; A ; A ; N ; O	Best y Best y Match  Qy  Qy  Db  Qy  Qy  Db	RESULT US-10- US-10- US-10- J Seque J Pates J GENE J TITI J CURR	444440000000000000000000000000000000000
2 286-889-37 286-889-37 286-870953 ERAL INFORMATION: PPLICANT: Gallatin, PPLICANT: Van der V ITLE OF INVENTION: ORRESPONDENCE ADDRESS ADDRESSE: Marshal STREET: 233 South CITY: Chicago	match Local Similarity Local Similarity ss 107; Conservat 2 FDLYFILDKSGS                           43 FDLYFVLDKSGS 62 ROGLBELOKVLP                     103 SKGLBDLKRVSP 1122 REANRSRDLGAI                   161 KEAKISRSLGAS	1 04-047-2639 04-047-2639, Applicatio t No. 6943241 AL INFORMATION: ICANT: HELIX RESEARC E OF INVENTION: NO. REFERENCE: H1-A0105 ENT APPLICATION NUMBERT FILING DATE: 20 R APPLICATION NUMBER AF FILING DATE: ER OF SEQ ID NOS: 40 DARE: PatentIn Ver. D NO 2639 TH: 488 E: PRT H000 Bapiens ANISM: H000 Bapiens	8 138.5 14.7 1161 9 138.5 14.7 1161 1 138.5 14.7 1161 1 138.5 14.7 1161 2 138.5 14.7 1161 2 138.5 14.7 1161 3 138.5 14.7 1161 5 138.5 14.7 1161 5 136.5 14.7 1161 6 136.5 14.5 216 6 136.5 14.1 1152 9 132.5 14.1 1152 1 132.5 14.1 1153 1 132.5 14.1 1153
/08286889 mich en, Monica 5470953el Human 2 Integr 5470953el Fuman 2 Integr	SA2; DB 2; NO. 7.3e-54; NO. 7.3e-54; NO. 7.3e-54; AAKFISPOLRMS     :    :  :  :  :  LABERFVSPEMRLS EQIYYENROGYRT       :  :  :  :  EQIQKAGGLKT ARIADSKDHVFPV	ALIGNMENTS /10104047 /STITUTE 241el full length cDNA US/10/104,047 3-25	1 US-08-485-618-53 1 1 US-08-362-652-53 1 1 US-08-605-672-53 1 1 US-08-482-293A-53 1 1 US-08-482-363-53 1 2 US-09-193-043-53 1 2 US-09-193-043-53 2 US-09-795-872-5 4 PCT-US95-04439-1 1 US-08-476-062A-43 2 PCT-US96-01314-43 3 PCT-US96-01314-43 3 PCT-US96-01314-43 3 US-08-486-689-3 3 1 US-08-286-889-3 3 1 US-08-286-889-3 3 1 US-08-485-618-3 3 1 US-08-485-618-3 3 1 US-08-485-652-3
in Alpha Subunit & Borun	Indels 2; Gaps 1;  FIVFSTRGTTLMKLTEDREQI 61		Sequence 53, Appl Sequence 5, Appl Sequence 5, Appl Sequence 41, Appl Sequence 43, Appl Sequence 43, Appl Sequence 3, Appl Sequence 3, Appli Sequence 3, Appli

Illinois

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ર્
                                                                                                                                                                                                                                                                                                                                                                        US-08-485-618-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-286-889-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 53
                                                                                                                                                                                                                                                                                                                               Patent No. 5728533
                                                                                                                                                                                                                                                                                                                                                   Sequence 37,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/173,497

FILING DATE: 23-DEC-1993

ATTORNEY,AGENT INFORMATION:

NAME: Williams Jr., Joseph A.

REGISTRATION NUMBER: 238,659

REFERENCE/DOCKET NUMBER: 27866/32168

TELECOMMUNICATION INFORMATION:

TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1151 amino aci
                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                              STREET: Chicago
CITY: Chicago
Tinited
Tinited
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                        APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vkeren, Monica
TITLE OP INVENTION: NO. 5728533el Human 2 Integrin Alpha Subunit
NUMBER OF SEQUENCES: 103
CORRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 1151 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             116 LFFYSE--REANRSRDLGAIVYCVGVKD-FNB-TQLARI-----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                    313 LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               57 DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            l Similarity 27.7
53; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60606-6402
                                                                                                60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LQGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                   Application US/08485618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         United
                                                                                                                    United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15.0%; Score 141.5; DB 1; 27.7%; Pred. No. 4.7e-07; tive 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/08/286,889
    Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10;
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-485-618-37
                                                                                                                                                                                                                                                                                                                                                                                                            US-08-362-652-37
                                                                                                                                                                                                                                                                                                                                                                 Sequence 37, Application US/08362652
Patent No. 5766850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER:
            COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
COMPUTER: PROPERTY MOREON PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                         APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5766850el Human 2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 93
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: 312-4.
TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                   COUNTRY:
                                                                                                                                                                         STATE:
                                                                                                                                                                                            CITY:
                                                                                                                                                                                                            STREET:
  APPLICATION NUMBER:
                                                                                                                                   COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         313 LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      116 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             167 LOGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   57 DREQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
)GY: linear
                                                                                                                                                                       Chicago
Illinois
                                                                                                                                                                                                              233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15.0%; Score 141.5; DB 1; nilarity 27.7%; Pred. No. 4.7e-07; Conservative 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1151 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               38,659
US/08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27866/32797
                                      Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10;
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-605-672-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         श
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         १
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-362-652-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 53; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 37, Application US/08605672
Patent No. 5817515
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACENTIN Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                           APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 581751561 Human 2 Integrin Alpha Subunit
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 1151 amino acids
TYPE: amino acid
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: U
FILING DATE: 23-DEC-1
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                          CLASSIFICATION: 530
                                                                          FILING DATE:
                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                 CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      116 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   57 DREQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                         60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LQGIIHSILKK 177
                                                                                                                                                                                                                                                                            Illinois
                                                                                                                                                                                                                                                           United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15.0%; Score 141.5; DB 1; 27.7%; Pred. No. 4.7e-07; tive 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US 08/173,497
                                                                                             US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                37:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27866/32391
                                                                                                                                       #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 6
US-08-482-293A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-605-672-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 37, Application Patent No. 5831029
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/482,293A
                                                                                                                                                                                                                                                                                                STREET: 2-
STREET: 11inois
Third
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
                                                                                                                                                                                                                                        COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                  COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Williams Jr., Joseph A
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 1151 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313 LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        167 LQGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                257 PLEYŚDVIPAADKA---ĠIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 116 LFFYSE--REANRSRDLGAIVYCVGVKO-FNE-TQLARI-----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  57 DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/08482293A
                                                                                                                                                                                                                                                                                                                                                          E: Marshall, O'Toole, Gerstein, Murray & Borun
233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15.0%; Score 141.5; DB 1; 27.7%; Pred. No. 4.7e-07; tive 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                           Human
                                                                                                                                                                                                                                                                                                                                                                                                                                           2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
```

56 10

FILING DATE: 5-AUG-1994
RIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-943-363-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-482-293A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 37, Application US/08943363 Patent No. 5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 312-474-6300
TELEPAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 37:
SEQUENCE CHARACTERISTICS:
LENGTH: 1151 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
NAME: WILLIAMS JR., JOSEPH A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el Human 2 Integrin Alpha
NUMBER OF SEQUENCES: 114
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                   CURRENT APPLICATION DATA: US APPLICATION NUMBER: US
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                          STREET: Chicago
                   APPLICATION NUMBER: US FILING DATE: 5-AUG-1994
                                                                                                                                            CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                   ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                          STATE: Illinois
                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    116 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFFVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  57 DREQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LRSIQROLQEK 323
                                                                                                                                                                                                                                                                                                                                                      United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15.0%; Score 141.5; DB 1; 27.7%; Pred. No. 4.7e-07;
                                      US 08/286,889
                                                                                                                                                                                       US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          37:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 38; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-943-363-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
  밁
                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-193-043-37
                                                                                                                                                                                  ; ORGANISM: Rattus rattus US-09-193-043-37
                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/193,043
CURRENT FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1994-08-05
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER APPLICATION NUMBER: 08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 37:
SEQUENCE CHARACTERISTICS:
LENGTH: 1151 amino acids
TYPE: amino acid
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 114
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 37
LENGTH: 1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 37, Application US/09193043
Patent No. 6251395
GENERAL INFORMATION:
APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
APPLICANT: Van der Vieren, Monica
TITLE OP INVENTION: No. 6251395el Human 2
FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                         Matches
                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                  TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                       y Match 15.0%; Score 141.5; DB 2;
Local Similarity 27.7%; Pred. No. 4.7e-07;
hes 53; Conservative 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Match 15.0%; Score 141.5; DB 1; Local Similarity 27.7%; Pred. No. 4.7e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  257 PLEYSDVIPAADKA---GIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             116 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD 256
142 DIAFLIDGSGSINORDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    57 DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 DLYFILDKSGSV-LHHWNEIYYFYEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                          3 plyfildxsgsv-lhhmneiyyfyeQlahkfisPQlkmsfivfstrgttlmkLte---- 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LRSIQROLOEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            37:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                        Length 1151;
                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25;
                                                                                                25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                Gaps
                                                                                                  10
```

```
ş
                                         밁
                                                                              र्
                                                                                                                                                                                                            ; NAME/KEY: misc_feature
; LOCATION: 1118
; OTHER INFORMATION: Xaa =
US-09-688-307A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-688-307A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 09/103,043
PRIOR PILING DATE: 1998-11-16
PRIOR PILING DATE: 1998-02-22
PRIOR PILING DATE: 1996-02-22
PRIOR PILING DATE: 1996-02-22
PRIOR APPLICATION NUMBER: 08/173,497
PRIOR APPLICATION NUMBER: 08/286,889
PRIOR APPLICATION NUMBER: 08/286,889
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR PILING DATE: 1994-12-21
PRIOR APPLICATION NUMBER: 08/943,363
PRIOR APPLICATION NUMBER: 08/943,363
PRIOR FILING DATE: 1997-10-03
                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 114
SOFTWARE: PatentIn Ver. 2.
SEQ ID NO 37
LENGTH: 1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 37, Application US/09688307A Patent No. 6432404 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 643240461 Human Beta-2
FILE REFERENCE: 27866/36646
CURRENT APPLICATION NUMBER: US/09/688,307A
CURRENT FILING DATE: 2000-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature
LOCATION: 361
COTHER INFORMATION: Xaa = any or unknown amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: 464
OTHER INFORMATION: Xaa =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Xaa =
                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature
LOCATION: 1117
                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Xaa
                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature
LOCATION: 506
                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Xaa =
                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc_feature
LOCATION: 486
                                           142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 257
                                                                                  w
DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 115
                                         DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                              DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 115
                                                                                                                              Conservative
                                                                                                                       15.0%; Score 141.5; DB 2; 27.7%; Pred. No. 4.7e-07; ative 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2.0
                                                                                                                                                                                                                                                                                                                                                            11
                                                                                                                                                                                                                              any or unknown amino acid
                                                                                                                                                                                                                                                                                               any
                                                                                                                                                                                                                                                                                                                                                          any or unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    any or unknown
                                                                                                                                                                                                                                                                                                                                                                                                                       any or
                                                                                                                                                                                                                                                                                               얹
                                                                                                                                                                                                                                                                                               unknown
                                                                                                                                                                                                                                                                                                                                                                                                                         unknown
                                                                                                                                                                                                                                                                                                                                                            amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                         amino
                                                                                                                                                                                                                                                                                               amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 acid
                                                                                                                                                                   Length 1151;
                                                                                                                            Indels
                                                                                                                       25;
                                                                                                                       Gaps
                                         201
```

```
밁
                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                       US-08-485-618-55
                                                                                                                                                                                               RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Rattus rattus US-09-350-259-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 6620915el Human 2
FILE REFERENCE: 27866/35004
CURRENT APPLICATION NUMBER: US/09/350,259
CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/193,043
EARLIER FILING DATE: 1998-11-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 10
US-09-350-259-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś.
                                                      Sequence 55, Application US/08485618
Patent No. 5728533
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5728533e1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Patentin SEQ ID NO 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 37,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EARLIER APPLICATION NUMBER: 08/362,652
EARLIER FILING DAYE: 1994-12-21
EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DAYE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER FILING DATE: 1994-08-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 1151
TYPE: PRT
                  NUMBER OF SEQUENCES: 1
  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                            167 LQGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                                  257 PLEYSDVIPAADKA---
                                                                                                                                                                                                                                                                                                                                                                       116 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                             202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          167 LOGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     116 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           57 DREQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     h 15.0%; Score 141.5; DB 2; Similarity 27.7%; Pred. No. 4.7e-07;
                                                                                                                                                                                                                                                      LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LRSIQRQLQEK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/09350259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
  Marshall, O'Toole,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ver.
                                        103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2.0
                                                                                                                                                                                                                                                                                                                                  -GIIRYAIGVGDAFQEPTALKELNTIGSAPPODHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
Gerstein,
                                                        Human
                                                          N
  Murray & Borun
                                                          Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25;
                                                          Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              56
                                                                                                                                                                                                                                                                                                                                  312
                                                                                                                                                                                                                                                                                                                                                                                                             256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             256
```

```
밁
                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                RESULT 12
US-08-362-652-55
                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-485-618-55
                                                                                                                              Sequence 55, Application US/08362652
Patent No. 5766850
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino aci
                                                              APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: NO. 5766850el NUMBER OF SEQUENCES: 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
                             ADDRESSEE: Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET:
CITY: C
STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                   167
                                                                                                                                                                                                                                                                                                                                                      116
                                                                                                                                                                                                                                                                                                                                                                                                                                                      152 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 211
                                                                                                                                                                                                                                                                                                                     267
                                                                                                                                                                                                                                                                                                                                                                                    212 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD 266
                                                                                                                                                                                                                                                    323
                                                                                                                                                                                                                                                                                                                                                                                                                      57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       amino acid
)GY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chicago
                                                                                                                                                                                                                                                                                     LOGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                     PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                     LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                                   DREQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
Chicago
                                                                                                                                                                                                                                                    LRSIQRQLQEK 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1161 amino acida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            United States
                 E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.0%; Score 141.5; DB 1; 27.7%; Pred. No. 4.7e-07; tive 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27866/32797
                                                                                    Human
                                                                                    2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                         322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          56
                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                          RESULT 13
                                                                                                                                                                                                                                                                                                                                            몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                      ZIP: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
```

```
Sequence 55, Application US, VVIIII Sequence 55, Application US, VVIIII Sequence 55, Application US, VVIIII Sequence 55, Applicant: Gallatin, W. Michael Applicant: Van der Vieren, Monica TITLE OF INVENTION: No. 5817515el Hu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; MOLECULE TYPE: protein US-08-362-652-55
                                                                                                                                                                                                                                                                                                                                                  US-08-605-672-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING DATA:
APPLICATION NUMBER: US/08/362,652
FILING DATE:
CLASSIFICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                        NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: I
                                                                                      STREET: 200
STREET: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 312-474-0448
COUNTRY: United States
ZIP: 60606-6402
MPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            116 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            167 LQGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        267 PLEYSDVIPAADKA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          212 DPQSLVDPIVQLQ----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          152 DIAFLIDGSGSINORDFAOMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57 preqirqgleetokvlpggbtymhegferaseqiyyenrqgyrta-sviialtpgelheb 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                    LRSIQROLQEK 333
                                                                                    Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15.0%; Score 141.5; DB 1; nilarity 27.7%; Pred. No. 4.7e-07; Conservative 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1161 amino acide
                                                                                                                              E: Marshall, O'Toole, Gerstein, Murray & Borun
233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              United
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              55:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27866/32391
                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Version
                                                                                                                                                                                                                        2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
```

211 5 10;

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                       श
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                          US-08-482-293A-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-605-672-55
                                                                                                                                                            Sequence 55, Application US/08482293A

PATCHI NO. 5831029

GENERAL INFORMATION:

APPLICANT: Gallatin, W. Michael

APPLICANT: Van der Vieren, Monica

TITLE OF INVENTION: No. 5831029el Human 2 Integrin Alphe

NUMBER OF SEQUENCES: 103

CORRESPONDENCE ADDRESS: Marshall, O'Toole, Gerstein, Murray & Borun

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino aci
             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 0: FILING DATE: 23-DEC-1993 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 0: FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                              STATE:
                                                                                                                              STREET: 233 S
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659 REFERENCE/DOCKET NUMBER: 2786
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                     323
                                                                                                                                                                                                                                                                                                                                                                                                                                                           167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      116 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 152 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                         60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                   LRSIQRQLQEK 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                           LQGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DREQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 115
                                                                                                            Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-3856
                                                                                                                                                233 South Wacker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1161 amino acids
                                                                                         United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15.0%; Score 141.5; DB 27.7%; Pred. No. 4.7e-07
PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              38;
                                                                                                                                                Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                  6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version #1.25
                                                                                                                                                Sear
                                                                                                                                                                                                                         2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 1161;
                                                                                                                                                                                                                           Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                     US-08-943-363-55
                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-482-293A-55
                                                                                                                                                                                                                                                                                                                                           Sequence 55, Application US/08943363 Patent No. 5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 08/362,6
PILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                    NUMBER OF SEQUENCE.
CORRESPONDENCE ADDRESS:
CORRESPONDENCE Marshall, O'Toole,
CORRESPONDENCE Marshall, O'Toole,
COURTES COUTH Wacker Drive
                                                                                                                                                                                                                                            APPLICANT: Gallatin, W. Michael APPLICANT: Van der Vieren, Monica TITLE OF INVENTION: No. 5837478el NUMBER OF SEQUENCES: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                  STREET: 20-
STREET: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                 COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: am:
TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 0 FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          116 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   212 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             152 DIAPLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
ARE: PatentIn Release #1.0, APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                LRSIQRQLQEK 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LQGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       amino acid
                                                                                                                                                    Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.0%; Score 141.5; DB 1; 27.7%; Pred. No. 4.7e-07; tive 38; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08/173,497
                                                                                                                                                                                          Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27866/32684
                                                                                                                                                                                        Gerstein, Murray & Borun
e, 6300 Sear Tower
                                                                                                                                                                                                                                                                      Human
                     Version
                                                                                                                                                                                                                                                                    2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25;
```

```
APPLICATION NUMBER: US/08/943,363
FILING DATE:
CLASSIPICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION NUMBER: US 08/362,652
FILING DATE: 1-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 30,659
REFERENCE/DOCKET NUMBER: 27-B66/32684
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEPHONE: 312-474-6300
TELEFAX: 32-3856
INFORMATION FOR SEQ ID NO: 55:
SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: protein
US-08-943-363-55
Search completed: December 14, 2005, 11:21:08 Job time : 16.3226 secs
                                                                                                र्
                                                                                                                                        밁
                                                                                                                                                                      5
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                     5
                                                                        밁
                                                                                                                                                                                                                                                                                                                                                        Query Match 15.0%; Score 141.5; DB 1; Length 1161; Best Local Similarity 27.7%; Pred. No. 4.7e-07; Matches 53; Conservative 38; Mismatches 75; Indels 25;
                                                                                                                                                                                                               116 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 166
                                                                                                                                                                                                                                                                                     167 LOGIIHSILKK 177
                                                                        323
                                                                                                                                                                                                                                                                                                        3 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE-----
                                                                    LRSIQRQLQEK 333
                                                                                                                                                                                                                                                                                                                                                               Indels 25; Gaps
                                                                                                                                                                                                                                                                                                                              56
```

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query
Match
               1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_42_222
943
1 GFDLYFILDKSGSVLHHMNE......DGFQALQGIIHSILKKSCIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   December 14, 2005, 11:18:07; Search time 54.5297 Seconds (without alignments) 1386.897 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1867569 segs, 417829326 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Published Applications AA Main:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US11A_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
               B
                               US-10-038-307-26
US-10-201-292-26
US-10-201-292-26
US-10-038-307-2
US-10-038-307-2
US-10-038-307-22
US-10-038-307-22
US-10-038-307-22
US-10-038-307-24
US-10-201-292-24
US-10-201-292-24
US-10-201-292-24
US-10-201-292-34
US-10-201-292-34
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-30
US-10-201-292-30
US-10-201-292-20
US-10-201-292-20
US-10-301-822-199
US-10-301-822-199
US-10-301-822-199
US-10-474-794-187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUMMARIES
  Sequence 26, Appl Sequence 12, Appl Sequence 12, Appl Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 24, Appli Sequence 24, Appli Sequence 24, Appli Sequence 24, Appli Sequence 26, Appli Sequence 28, Appli Sequence 28, Appli Sequence 31, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli Sequence 18, Appli Sequence 18, Appli Sequence 20, Appli Sequence 187, Appli Sequence 187, Appli Sequence 212, Appli Sequence 212, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 213, Appli Sequence 214, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, Appli Sequence 215, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Description
RESULT 2
US-10-201-292-26
US-10-201-292-26
Sequence 26, Application US/10201292
publication No. US20030144193A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
```

음 성	8 8 8 8 8	US	
		SULT 1 -10-03 Sequel Public GENERA APPLI APPLI APPLI TITLE T	4 4 4 4 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0
181 E   222 E	1 G 42 G 61 II 102 II 121 E 162 E	1 1 38-307-2 made 26, made 26, mad INFORMAL INFORMATION INFORMATIO	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
181 222	FDLYFIL	307-26 26, Application ion No. US200301 INFORMATION: US200301 INFORMATION: ROT UNT: James B. ROT UNT: Engin OZKAY LANT: Judith J. H PINVENTION: Tan PERENCE: 7853-25 APPLICATION NUM TAPPLING DATE: 2 OF SEQ ID NOS: 2 OF SEQ ID NOS: 2 OF SEQ ID NOS: 2 OF SEQ ID NOS: 2 SE: FASTSEQ for W MO 26 1: 328 1: 328 1: 328 307-26 1: 3181; Conservat	100.00 99.5 99.00 99.00 99.00 99.00 99.00 99.00 97.8 97.8 97.8
	DKSGSVL	RC CI. CI. CI. CI. CI. CI. CI. CI. CI. CI	5 6 6 2 3 5 6 4 4 5 6 6 2 3 5 6 6 2 3 5 6 6 2 3 5 6 6 2 3 5 6 6 2 3 5 6 2 5 6 2 3 5 6 2
		3/10 786AN (KEEF (CEEF (CEEF (CEEF (CEEF (CEEF (CEEF ).08	N /0 W W U A A N N A A A A A A A A
	GFDLYFILDKSGSVLHHWNEITYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ	n US/10038307 1134786A1 O'KEEFE YNAK PREALEY ngo 197 and Tango 216 Compositions a 53-99 MBER: US/10/038,307 2002-06-28 26 Windows Version 4.0 Windows Version 4.0  100.0%; Score 943; DB 4; Length 100.0%; Pred. No. 1.7e-90; Indels	US-10-979-159-232 US-11-047-278-6 US-09-833-245-620 US-09-918-715-301 US-09-918-715-301 US-10-474-794-194 US-10-979-159-301 US-10-979-159-301 US-10-201-292-12 US-10-201-292-12 US-10-201-292-12 US-10-201-292-16 US-10-38-307-16 US-10-38-307-16 US-10-201-292-16 US-10-201-292-16 US-10-201-292-16 US-10-201-292-16 US-10-201-292-16 US-10-201-292-16 US-10-201-292-16 US-10-201-292-16
	VPSTRGTTLMKLTEDREQ 60	and Methods h 328; ls 0; Gaps 0;	Sequence 232, App Sequence 620, Appli Sequence 194, App Sequence 301, App Sequence 301, App Sequence 194, App Sequence 194, App Sequence 194, App Sequence 12, Appl Sequence 12, Appl Sequence 11, Appl Sequence 16, Appl Sequence 16, Appl Sequence 16, Appl Sequence 17, Appl Sequence 16, Appl Sequence 17, Appl Sequence 16, Appl Sequence 16, Appl Sequence 17, Appl Sequence 16, Appl Sequence 17, Appl Sequence 17, Appl Sequence 18, Appl Sequence 18, Appl Sequence 19, Appl Sequence 19, Appl Sequence 19, Appl Sequence 11, Appl Sequence 1

```
; APPLICANT: Judith J. HEALEY
; TITLE OF INVENTION: Tango 197 and Tango 216
; FILE REFERENCE: 7853-253-999
; CURRENT APPLICATION NUMBER: US/10/201,292
; CURRENT FILING DATE: 2003-02-14
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 26
; SEQ ID NO 26
; LENGTH: 328
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-201-292-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-796-753-12
                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/796,753
CURRENT FILING DATE: 2001-03-01
PRIOR APPLICATION NUMBER: 09/183,175
PRIOR FILING DATE: 1998-10-30
PRIOR APPLICATION NUMBER: 09/223,094
PRIOR APPLICATION NUMBER: 09/223,094
PRIOR APPLICATION NUMBER: 09/223,546
PRIOR APPLICATION NUMBER: 09/223,546
PRIOR APPLICATION NUMBER: 09/224,246
PRIOR APPLICATION NUMBER: 09/224,246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 12, Application US/09796753 
Publication No. US20030027998A1 
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 943; DB 4; Best Local Similarity 100.0%; Pred. No. 1.7e-90; Matches 181; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: McCarth
                                                                                                                                                                                                                                        FILING DATE: 1999-03-01
APPLICATION NUMBER: 09/312,359
FILING DATE: 1999-05-14
APPLICATION NUMBER: 09/336,536
                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 09/
FILING DATE: 1999-09-30
APPLICATION NUMBER: 09/
FILING DATE: 1999-12-23
                                                     APPLICATION NUMBER:
FILING DATE: 1999-(
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                               APPLICATION NUMBER: FILING DATE: 1999-
                                                                                                                                                       FILING DATE:
                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 1999-0
                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            162 EREANKSKOLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          102 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRWSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        McCarthy, Sean A.
VENTION: SECRETED PROTEINS AND USES THEREOF
NCB: 7853-227-999
                                                                                                                                                                                                                              1999-06-18
                                                                                                               1999-07-30
                                                                                                                                                     1999-06-30
                                                                                                                                                                                        1999-06-29
                                                                                                                                                                                                                                                                                                                                                                                   1998-12-30
                                                                           1999-09-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   197 and Tango 216 Compositions and Methods
                                                                                               09/399,723
                                                                                                                                                                                                                                                                                                                           60/122,458
                                                                                                                                                                                                                                                                                                                                                                 09/259,388
                   09/471,179
                                                                                                                                   09/365,164
                                                                                                                                                                      09/345,464
                                                       09/409,634
                                                                                                                                                                                                          09/342,687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 328;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    221
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                             ; NUMBER OF SEQ ID NOS: 26
; SCPTWARE: FastSEQ for Windows Version
; SEQ ID NO 2
; LENGTH: 333
; TYPE: PRT
; ORGANIEM: Homo sapiens
US-10-038-307-2
                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens US-09-796-753-12
                                                                                                                                                                                                                                                                                                                                       US-10-038-307-2
                                                                                                                                              GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions
FILE REFERENCE: 7853-253-99
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 181; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS:
SEQ ID NO 12
LENGTH: 333
TYPE: PRT
                                                                                                                                                                                                                                                                                                  Sequence 2, Application US/10038307 Publication No. US20030134786A1
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 2000-09-20
PRIOR APPLICATION NUMBER: 09/677,751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OR APPLICATION NUMBER: 09/51/OR APPLICATION NUMBER: 09/51/OR FILING DATE: 2000-02-25
OR APPLICATION NUMBER: 09/51/OR APPLICATION NUMBER: 09/51/OR APPLICATION NUMBER: 09/5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R APPLICATION NUMBER: 09/63
RR FILLING DATE: 2000-07-31
RR APPLICATION NUMBER: 09/60
RR FILLING DATE: 2000-06-29
RR APPLICATION NUMBER: 09/60
RR FILLING DATE: 2000-06-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 2000-05-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 2000-05-14
APPLICATION NUMBER: 09/
FILING DATE: 2000-06-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                       222
                                                                                                                                                                                                                                                                                                                                                                                                                                        181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          102 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                       Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 943; DB 3; ilarity 100.0%; Pred. No. 1.8e-90; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000-06-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000-09-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1999-12-29
 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09/606,565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09/572,002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09/516,745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09/665,666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09/606,317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09/630,334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09/599,596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09/597,993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09/514,010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09/474,072
 Score
 943;
   DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 333;
 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                      and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             161
```

```
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: Undith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT APPLICATION UNMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FRSESEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 333
TYPE: PRT
ORGANISM: Homo sapiens
US-10-201-292-2
                                                                                                                      RESULT 6
US-11-047-278-8
                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                              밁
                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 5
US-10-201-292-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                             Sequence 8, Application US/11047278 Publication No. US20050196407A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 943; DB 4; Best Local Similarity 100.0%; Pred. No. 1.8e-90; Matches 181; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/10201292
Publication No. US20030144193A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 100.0%; P
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin
FILE REFERENCE: 960296.97745
                                                                                                                                                                                                                                                                                        102
                                                                                                                                                                                                      181
                                                                                                                                                                                                                                  162
                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     102
                                                                                                                                                                              222
                                                                                                                                                                                                                                                                                                                13
                                                                                                                                                                                                                                                                                                                                           42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42
                                                                                                                                                                                                                                                                                                                                         \vdash
                                                                                                                                                                                                      E 181
                                                                                                                                                                              E 222
                                                                                                                                                                                                                                                 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI 180
                                                                                                                                                                                                                                                                                      IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                  EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                         IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           m.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 1.8e-90; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                           Length 333;
                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Methods
                                                                                                                                                                                                                                                                                                                                                                                                <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     69
                     밁
                                                  δ
                                                                               밁
                                                                                                    S
                                                                                                                                   밁
                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 7
US-10-038-307-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                      Query Match
Best Local :
                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                    Local
                            171
                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181;
  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 E 181
                                                                                                          61
                                                                                                                                     51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42
                                                                                                                                                              Н
  E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E 222
```

```
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 22
LENGTH: 342
TYPE: PRT
ORGANISM: Homo sapiens
US-10-038-307-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KESFE
APPLICANT: Theresa L. O'KESFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Col
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEO ID NOS: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 333
; TYPB: PRT
; ORGANISM: Homo sapiens
US-11-047-278-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 22, Application US/10038307 Publication No. US20030134786A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR FILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: 60/251,481
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI 180
                                                                                                                                                                                                                                                                                             tch 100.0%; Score 943; DB 4; al Similarity 100.0%; Pred. No. 1.8e-90; 181; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     102 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   h 100.0%;
Similarity 100.0%;
81; Conservative 0
                              EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                              IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS 120
                                                                                                                                                                                           GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                          GFDLYFILDKSGSVLHHWNBIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
ERBANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 943; DB 6;
Pred. No. 1.8e-90;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Compositions and Methods
                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 333;
                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                             Gaps
                                                180
                                                                                                                                                                                                 110
                                                                                                 170
  230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                  0
```

**m**—

```
Sequence 22, Application US/10201292

Publication No. US20030144193A1

GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN

APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK

APPLICANT: JUGITH J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods

FILE REFERENCE: 7853-253-999

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT FILING DATE: 2003-02-14

NUMBER OF SEQ ID NOS: 36

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 22

LENGTH: 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                   Ś
                                                                                                                                ; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo Bapiens
US-10-038-307-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ᅜ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-201-292-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 8
US-10-201-292-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-038-307-24
                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 24
                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 24, Application US/10038307 Publication No. US20030134786A1 GENERAL INFORMATION:
                                                          Matches
                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                             APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    y Match 100.0%; s
Local Similarity 100.0%; E
hes 181; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      231
                                                          181;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E 181
GFDLYFILDKSGSVLHHMNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EREANRSRDIGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IROGLEELOKVLPGGDTYMHEGFERASEQIYYENROGYRTASVIIALTDGELHEDLFFYS
                                                        100.0%; Silarity 100.0%; Silarity 100.0%; Silarity 0; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 943; DB 4;
Pred. No. 1.8e-90;
                                                          Score 943; DB 4;
Pred. No. 1.9e-90;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 342;
                                                                                           Length 345;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                            Indels
                                                                                                                                                                                                                                                                                                                           Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>,,</u>
                                                          0
                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                230
```

```
APPLICANT: James B. ROTTMAN
APPLICANT: Theress L. O'KEEFE
APPLICANT: Theress L. O'KEEFE
APPLICANT: Ingin OXANNAK
APPLICANT: Judith J. HEALEY
ITITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FRASTSEQ for Windows Version 4.0
SEQ ID NO 24
LENGTH: 345
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                RESULT 11
US-11-047-278-2
                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 10
US-10-201-292-24
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/99/970,076
PRIOR APPLICATION NUMBER: US/05/01,076
PRIOR APPLICATION NUMBER: US/05/01,481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-201-292-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 24, Application US/10201292
Publication No. US20030144193A1
                                                                                                                                                                                                                                              Sequence 2, Application US/11047278
Publication No. US20050196407A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity Matches 181; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     162 ERBANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                       222 E 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             162 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  102 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     222 E 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              102 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        42 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  42 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 943; DB 4; illarity 100.0%; Pred. No. 1.9e-90; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 345;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
```

```
FILE REFERENCE: PF546PCT
CURRENT APPLICATION NUMBER: US/09/833,245
CURRENT FILING DATE: 2001-04-12
PRIOR APPLICATION NUMBER: 60/229, 358
PRIOR PILING DATE: 2000-04-12
PRIOR PILING DATE: 2000-12-21
PRIOR PILING DATE: 2000-12-21
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR PILING DATE: 2000-04-25
NUMBER OF SEQ ID NOS: 2267
SOPTWARE: PALENTIN Ver. 2.1
SEQ ID NO 621
                            ક
                                                                            밁
                                                                                                            S
                                                                                                                                                          밁
                                                                                                                                                                                        ક
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                            ; LENGTH: 403
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ई
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; LENGTH: 368
; TYPE: PRT
; ORGANISM: Homo Bapiens
US-11-047-278-2
  용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 943; DB 3; Best Local Similarity 100.0%; Pred. No. 2.3e-90; Matches 181; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 621, Application US/09833245 Publication No. US20040010134A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 943; DB 6; Best Local Similarity 100.0%; Pred. No. 2e-90; Matches 181; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PATENTIN VEY: 2.1
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Proteins
                                                                                                                                                            102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI 180
  222
                                       181
                                                                              162
                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           102 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS 161
                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                      42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42
                                                                                                                                                                                                                                                                             ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
E 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E 222
                                                                                                                                                                                                                                  GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ 60
                                                                                                                                                                                IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ 101
                                       E 181
                                                                            EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI
                                                                                                                   EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI 180
                                                                                                                                                            IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 6; Length 368;
                                                                                                                                                                                                                                                                                                                                                     Length 403;
                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                      101
                                                                              221
                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 221
```

```
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KREFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: Udith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT PILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 32
LENGTH: 479
TYPE: PRT
ORGANISM: Homo sapiens
US-10-201-292-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: James B. ROTTMAN

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Lamin OZKAYNAK

APPLICANT: Ludith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Metl

FILE REFERENCE: 7853-253-999

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT FILING DATE: 2003-02-14

NUMBER OF SEQ ID NOS: 36

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 28

LENGTH: 460

TYPE: PRT

ORGANISW: Homo sapiens

US-10-201-292-28
                                 S
 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 14
US-10-201-292-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
US-10-201-292-28
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 32, Application US/10201292
Publication No. US20030144193A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 28, Application US/10201292
Publication No. US20030144193A1
GENERAL INFORMATION:
                                                                          Matches
                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                        181;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          222 E 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            102 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181;
 2
Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 943; DB 4; 100.0%; Pred. No. 2.8e-90; o. Mismatches 0;
                                                                        100.0%; Score 943; DB 4;
100.0%; Pred. No. 2.9e-90;
tive 0; Mismatches 0;
                                                                                                          Length 479;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 460,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Methods
                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                161
   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                            0
```

Š 밁 S

δ 밁

문

```
WESULT 15
US-10-201-292-34
US-10-201-292-34

Sequence 34, Application US/10201292

Publication No. US20030144193A1

GENERAL INFORMATION:
APPLICANT: James B. ROTTWAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYMAK
APPLICANT: UNCENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7863-253-999

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT FILING DATE: 2003-02-14

NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 34
LENGTH: 504
TYPE: PAT
ORGANISM: Homo sapiens
Search completed: December 14, 2005, 11:59:02 Job time : 55.6964 secs
                                                                                                    ঠ
                                                                                                                                             밁
                                                                                                                                                                              र्
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                 δ
                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 943; DB 4; Length 504; Best Local Similarity 100.0%; Pred. No. 3.1e-90; Matches 181; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        162 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI 180
                                                                                                                                                   162
                                                                                                                                                                                                                          102 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    222 E 222
                                                                                                              181 E 181
                                                                                                                                                                        121 EREANRSRDLGAIVYCVGVKDENETQLARIADSKDHVFEVNDGFQALQGIIHSILKKSCI 180
                                                                         222 E 222
                                                                                                                                                                                                                                                                                                  42
                                                                                                                                                                                                                                                     61 IRQGLEBLQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS 120
                                                                                                                                                                                                                                                                                                EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                      221
                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                             0
```

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                          Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OM protein - protein search, using sw model
                                                                                                               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                      Published Applications AA New:*

1: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:*

8: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:*
Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_42_222
943
1 GFDLYFILDKSGSVLHHWNE......DGFQALQGIIHSILKKSCIE 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   December 14, 2005, 11:18:48; Search time 2.65999 Seconds (without alignments) 458.218 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       51441 seqs, 6734002 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.
B
                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           51441
```

Ö.	Score	Match	Match Length DB	В	ID	Description	_
٦	943	100.0	564	7	US-11-186-284-199	Sequence 199, App	
N	132.5	14.1	1152	7	US-11-080-026-4	Sequence 4, Appli	_
w	126.5	13.4	3063	7	US-11-186-284-26	26	_
4.	109	11.6	915	σ	US-10-131-826A-294	294	
(J)	109	11.6	956	7	US-11-113-424-39	39	
σ	108	11.5	1141	σ	US-10-601-368-24	24	_
7	108	11.5	1166	σ	US-10-601-368-22	22	
æ	108	11.5	1188	σ	US-10-601-368-21	Sequence 21, Appl	
9	105.5	11.2	739	7	US-11-057-047-2	Sequence 2, Appli	
10	105.5	11.2	764	7	US-11-057-047-1	۲,	_
11	105.5	11.2	798	σ	US-10-821-234-1034	Sequence 1034, Ap	-
12	104	11.0	1141	Q	US-10-601-368-6	Sequence 6, Appli	
13	104	11.0	1166	σ	US-10-601-368-4	Sequence 4, Appli	
14	104	11.0	1188	0	US-10-601-368-3	Sequence 3, Appli	_
15	104	11.0	1188	7	US-11-000-463-338	Sequence 338, App	_
16	104	11.0	1188	7	US-11-000-463-810	Sequence 810, App	
17	103.5	11.0	182	0	US-10-601-368-25	Sequence 25, Appl	_
18	100.5	10.7	828	σ	US-10-995-561-983		
19	100.5	10.7	918	σ	US-10-995-561-981	Sequence 981, App	
20	100.5	10.7	1019	σ	US-10-995-561-982		
21	99.5	10.6	182	0	US-10-601-368-7		
22	97.5	10.3	761	7	US-11-057-047-6	Sequence 6, Appli	
23	95.5	10.1	1179	7	US-11-097-125-1		
24	95.5	10.1	1196	Q	US-10-995-561-921	92	
25	94	10.0	678	7	US-11-102-240-34		_

<b>১</b> ৪ ১	유 성	US	
	Query Ma Best Loc Matches	SULT 1 28-21-166-284 Sequence 19 Publication GENERAL INF APPLICANT: APPLICANT	44444000000000000000000000000000000000
61 IR 	tch al ( 18] 1	i-284-199 ie 199, Ap ition No. il NPORMAT ANT: Mill ANT: Mill ANT: Mill ANT: Mill ANT: Mill ANT: Mill ANT: Mill ANT: Mill ANT: Mill ANT: Mill ANT: Mill ANT: Mill ANT: Mill ANT: Mill ANT: Mill ANT: Kam ANT: Kam Mon ANT: Thi ANT: Thi ANT: Thi ANT: Thi ANT: Thi ANT: Thi ANT: Thi ANT: Thi ANT: Thi ANT: Thi ANT: Thi ANT: Mon ANT: TILING ANT: TIL	91. 89.5 89.5 89.5 73.5 73.5 73.5 73.5 73.5 73.5 73.5 73
QGLE      QGLE	ila Co DLY DLY	199 Applicat. No. US2005 MATATION Berger, A. Guillemett Kamatkar, Schlegel, Ardention: No Worntion: No Worntion: No Worntion: No Worntion: No Cafion Num Gaffe: 20 Gaf	777777777777779999 777777777777777885557
BLQKVLPGGDTYMHEGF              BLQKVLPGGDTYMHEGF  SRDLGAIVYCVGVKDFN	100 100 vative KSGSVL        KSGSVL	lication US/11 IS20050266493AI ON: ON: ON: CN: CN: CN: CN: CN: CN: CN: CN: CN: C	1167 1167 353 3448 3948 2964 468 468 629 629 244 1734 1734 1734 1734 1734 1734 1734 17
CVGN	. 0 %;	mace racy hange fire phen fire fire fire fire fire fire fire fire	0000770000000000007707
ERASEQIYYENRQO               ERASEQIYYENRQO ETQLARIADSKDHV	; Score 943; DB 7; ; Pred. No. 1.3e-84; 0; Mismatches 0; NEITYFVEQLAHKFISPQLRMS	1.186284	US-11-097-125-2 US-10-601-368-18 US-11-137-465-44 US-11-137-465-45 US-10-10-366-2880 US-10-793-626-2880 US-10-793-626-2880 US-10-793-626-2880 US-10-467-657-5896 US-10-467-657-7506 US-10-467-657-73084 US-10-467-657-73086 US-11-193-715-6 US-11-193-715-6 US-11-193-715-6 US-11-513-786-1 US-10-513-786-1
YRTASVIIALTDGELHEDLFFYS 120 	Length 564;  i;  O; Indels O; Gaps O;  NSFIVESTRGTTLMKLTEDREQ 60	KITS, AND , ASSESSMENT, PREVENTION, AND	Sequence 2, Appli Sequence 18, Appl Sequence 44, Appl Sequence 45, Appl Sequence 158, App Sequence 2880, App Sequence 238, App Sequence 636, Ap Sequence 103, App Sequence 7846, Ap Sequence 796, Ap Sequence 706, Ap Sequence 706, Ap Sequence 7106, Ap Sequence 706, Appli Sequence 4, Appli Sequence 4, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli

```
ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                             RESULT 3
US-11-186-284-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 4, Application US/11080026
Publication No. US20050260192A1
GENERAL INFORMATION:
APPLICANT: Springer, Timothy A.
APPLICANT: Shimaoka, Motomu
APPLICANT: Lu, Chafen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 4
                                                                                                                                                                                                                                                                                   GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                      Sequence 26, Application US/11186284 Publication No. US20050266493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS,
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSI
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MEMO1-029P2RNM
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 09/945,265
PRIOR FILING DATE: 2001-08-31
PRIOR APPLICATION NUMBER: US 60/229,700
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEO ID NOS: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Lu, Chafen
TITLE OF INVENTION: MODIFIED POLYPEPTIDES STABILIZED IN A
TITLE OF INVENTION: DESIRED CONFORMATION AND METHODS FOR PRODUCING SAME
FILE REFERENCE: CEBF-P02-021
CURRENT APPLICATION NUMBER: US/11/080,026
CURRENT FILING DATE: 2005-03-15
CURRENT FILING DATE: 2005-03-15
                                                                                                                                                                                                                     APPLICANT: Millennium Pharmaceuticals, APPLICANT: Berger, Allison APPLICANT: Guillemette, Tracy L.
                                                                                                                                                                                APPLICANT:
                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 1152
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200 FTEKEFQNNENERSLVKPITQLL--GRTHTATGIRKVVRELENITNGARKNAFKILVVIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     222 E 222
                                                                                                                                                                                                                                                                                                                                                                                                                            315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 DLYFILDKSGSVL-HHWNEIYYFYEQLAHKFISPQLRMSFIVFSTRGTTLMKLTED----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                         Berger, Allison
Guillemette, Tracy L.
Kamatkar, Shubhangi
Schlegel, Robert
Monahan, John E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DIAFLIDGSGSIIPHDFRRMKEFVST----VMEQLKKSKTLFS-----LMQYSEEFRIH 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DGEKFGDPLGYEDVIPEADRE---GVIRYVIGVGDAFRSEKSROELNTIASKPPRDHVFQ 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----REQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALT
                                                                                                                                                                                                                                                                                                                                                                                                                            VNN-FEALKTIQNQLREK 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                               VNDGFQALQGIIHSILKK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DGELHEDLFFYSE--REANRSRDLGAIVYCVGVKDFNETQLAR-----IADS--KDHVFP 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 132.5; Db //
Pred. No. 3.1e-05;
Mismatches 66;
                                                                                                                                                                                                                                                                       Inc.
                                                                                    ASSESSMENT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1152;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39;
                                                                                       PREVENTION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57
                                                                                       AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: PRT
; ORGANISM: Homo Sapiens
US-11-186-284-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR FILING DATE: 2001-12-10
PRIOR FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR PRILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR FILING DATE: 2002-05-20
PRIOR FILING DATE: 2002-05-20
PRIOR FILING DATE: 2002-05-20
  FILE REFERENCE: P3330R1C128
CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/04991
PRIOR FILING DATE: 1997-06-18
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/05974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR APPLICATION NUMBER: 60/059115
PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-131-826A-294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: FastSEQ for Windows Version SEQ ID NO 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 294, Application US/10131826A Publication No. US20050245730A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                             APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Baker, Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 3063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        609 SFELTQSICL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 171 IHSILKKSCI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               55;
                                                                                                                                                                                                                                                                                                          Watanabe, Colin K
Wood, William
                                                                                                                                                                                                                                                                                                                                                                                             Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                              Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                      Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                      Stewart, Timothy A
                                                                                                                                                                                                                                                                                                                                                                                                              Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DeForge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Beresini, Maureen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
```

```
440 DIVFLVDGSYSIGIANFVKVRAFLEVLVKSFEISPNRVQISLVQYSRDPHTEFTLKKFTK
                                        113 HEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIAD--SKDHVFPVNDGFQALQGI 170
                                                                                    500 VEDII----EAINTFPYRGGSTNTGKAMTYVREKIFVPSK-GSRSNVPKVMILITDGK-
                                                                                                                                    57 DREQIRQGLEELQKVLP--GGDTYMHEGFERASEQIYYENRQGYRT--ASVIIALTDGEL
                                                                                                                                                                                                                           3 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFST---RGTTLMKLTE
SSDAF---RDPAIKLRNSDVEIFAVGVKDAVRSELEAIASPPAETHVFTVED-FDAFQRI
                                                                                                                                                                                                                                                                      13.4%; Score 126.5; DB 7
28.9%; Pred. No. 0.00042;
tive 38; Mismatches 74
                                                                                                                                                                                                                                                                                                                       DB 7;
                                                                                                                                                                                                                                                                              74;
                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                       Length 3063;
                                                                                                                                                                                                                                                                              23;
                                                                                                                                                                                       499
  309
                                                                                           552
                                                                                                                                       112
                                                                                                                                                                                                                                  56
                                                                                                                                                                                                                                                                                12
```

```
PRIOR APPLICATION NUMBER: 60/294,075
PRIOR FILING DATE: 2001-05-29
PRIOR APPLICATION NUMBER: 60/288,153
PRIOR FILING DATE: 2001-05-02
NUMBER OF SEQ ID NOS: 190
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 5
US-11-113-424-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ) ORGANISM: Homo Sapien US-10-131-826A-294
                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/311,590
PRIOR FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: 60/257,314
PRIOR FILING DATE: 2000-12-20
PRIOR FILING DATE: 2000-12-20
PRIOR APPLICATION NUMBER: 60/311,613
PRIOR FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: 60/315,617
PRIOR APPLICATION NUMBER: 60/317,506
PRIOR APPLICATION NUMBER: 60/307,506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/559184
PRIOR APPLICATION NUMBER: 60/059184
PRIOR APPLICATION NUMBER: 60/059263
PRIOR APPLICATION NUMBER: 60/059352
PRIOR APPLICATION NUMBER: 60/059352
PRIOR FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 39, Application US/11113424 Publication No. US20050260713A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 294
LENGTH: 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                          PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/11/113,424
CURRENT FILING DATE: 2005-04-21
PRIOR APPLICATION NUMBER: 60/256,704
PRIOR FILING DATE: 2000-12-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Gangolli et al.
TITLE OF INVENTION: Polypeptides and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / Match 11.6%; Score 109; DB 6; I
Local Similarity 24.0%; Pred. No. 0.0045;
1e8 46; Conservative 43; Mismatches 77;
                                                                                                                                                   APPLICATION NUMBER: 60/322,358
FILING DATE: 2001-09-14
APPLICATION NUMBER: 60/294,075
FILING DATE: 2001-05-29
                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/307,506 FILING DATE: 2001-07-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       114 FKRKSEVERAVKRMRHLSTGTMTGLAIQY---ALNIAFSEAEGARPLRENVPRVIMIVTD 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                55 TEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYR----TASVIIALTD 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 DLYFILDKSGSV-LHHWNEIYYF-VEQLAHKFISPQL-RMSFIVFSTRGTTL-----MKL 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ETLTSVFOKKLC 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GRPQDSV----AEVAAKARDTĞILIFAIĞVĞQVDFNTLKSIĞSEPHEDHVFLVAN-FSQI 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QGIIHSILKKSC 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GELHEDLFFYSEREANRSRDLGAIVYCVGV--KDFNETQLARIADSKDHVFPVNDGFQAL 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DLVFIIDSSRSVNTHDYAKVKEFIVDILQFLDIGPDVTRVGLLQY---GSTVKNEFSLKT 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 915;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
RESULT 7
US-10-601-368-22
(S-10-601-368-22
; Sequence 22, Application US/10601368
; Publication No. US20050260702A1
; GENERAL INFORMATION:
                                                                                                                                                                                          S
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
```

```
US-10-601-368-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 6
US-10-601-368-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-11-113-424-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 24, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REPERENCE: 07334-275001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                       Match 11.5%;
Local Similarity 24.2%;
                                                                                                                                                                                                                                                                                    164 DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL-NDYRS
                                            152 DSKDHVFPVNDGFQALQG 169
                                                                                            280
                                                                                                                                                                                           222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  171
339 --KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 226 ETLTSVFQKKLC 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                168 QGIIHSILKKSC 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            110 GELHEDLFFYSEREANRSRDLGAIVYCVGV--KDFNETQLARIADSKDHVFPVNDGFQAL 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              114 FKRKSEVERAVKRMRHLSTGTMTGLAIQY---ALNIAFSEAEGARPLRENVPRVIMIVTD
                                                                                                                                                                                                                                     61 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                                                                                                                      48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              55 TEDREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYR-----TASVIIALTD 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             57 DLVFIIDSSRSVNTHDYAKVKEFIVDILQFLDIGPDVTRVGLLQY---GSTVKNEFSLKT 113
                                                                                                                                                                                                                                                                                                                                    3 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 DLYFILDKSGSV-LHHWNEIYYF-VEQLAHKFISPQL-RMSFIVFSTRGTTL-----MKL 54
                                                                                         LEKVIROSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL-
                                                                                                                                                                                        VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GRPQDSV----AEVÄAKARDTGILIFAIGVGQVDFNTLKSIGSEPHEDHVFLVAN-FSQI 225
                                                                                                                                         -----FYSEREANRSRDLGAIVYCVGVKD----FNETQLARIA 151
                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11.6%;
                                                                                                                                                                                                                                                                                                                                                                                      28; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       $; Score 109; DB 7; Length 95$; Pred. No. 0.0047;43; Mismatches 77; Indels
                                                                                                                                                                                                                                                                                                                                                                                                          Score 108; DB 6;
Pred. No. 0.0074;
                                                                                                                                                                                                                                                                                                                                                                                      84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 956;
                                                                                                                                                                                                                                                                                                                                                                                      38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26;
                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                          115
                                                                                                                                                                                                                                                                                       221
                                                                                                                                                                                        279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10
                                                                                                                                                                                                                                                                                                                                                                                      9
```

```
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 22
LENGTH: 1166
TYPE: PRT
ORGANISM: Mus musculus
US-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                APPLICANT: LOZA, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT ANI
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR TILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
밁
                                                                                                                                                                        ; NAME/KEY: SIGNAL ; LOCATION: (1)...(22) US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                   Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                         ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                 TYPE: PRT
                                                                                                                                                                                                                                                                                                        ENGTH: 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 y Match 11.5%; Score 108; DB 6; Local Similarity 24.2%; Pred. No. 0.0077;
                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200 VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD
  164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               48;
                                                                                   Similarity 48; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                --KDIVDALGDRIFSLEG 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DSKDHVFPVNDGFQALQG 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LEKVIROSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL-NDYRS 199
  DIVIVIDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL-NDYRS 221
                                        DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----FNETQLARIA 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Jose M.
                                                                                   11.5%; Score 108; DB 6; Length 1188; 24.2%; Pred. No. 0.0079; tive 28; Mismatches 84; Indels 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               38;
                                                                                     38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   115
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                   RESULT 10
                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-11-057-047-2
                                                                                                                                                                  US-11-057-047-1
                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR FILING DATE: 2004-12-14
PRIOR APPLICATION NUMBER: US04/015040
PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin version 3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFIME 739
APPLICANT: Holers, Vernon
APPLICANT: Thurman, Joshua
APPLICANT: Taube, Christia
APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
                                                                                                   Sequence 1, Application US/11057047 Publication No. US20050260198A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/11057047 Publication No. US20050260198A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Holers, Vernon
APPLICANT: Thurman, Joshua
APPLICANT: Taube, Christian
APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The Alternative Complement Pathway
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 739
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           339 --KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 152 DSKDHVFPVNDGFQALQG 169
                                                                                                                                                                                                                                                  417
                                                                                                                                                                                                                                                                                      147 LARIADSKDHVFPVNDGFQALQGIIHSILKKS 178
                                                                                                                                                                                                                                                                                                                                357 HVIILMTDGLHNMGGDPITVIDBIRDLLYIGKDRKNPREDYLDVYVFGVGPLVNQVNINA 416
                                                                                                                                                                                                                                                                                                                                                                      102 SVIIALTDG------ELHEDLFFYSEREANRSRDLGAIVYCVG--VKDFNETQ
                                                                                                                                                                                                                                                                                                                                                                                                              303 DSSNADWVTKQLNEINYEDHKLKSGTNT-----KKALQAVYSMMSWPDDVPPEGWNRTR 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              245 NIYLVLDGSDSIGASNFTGAKKCLVNLIEKVASYGVKP--RYGLVTYATYPKIWVKVSEA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       280 LEKVIROSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL- 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       222 VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD
                                                                                                                                                                                                                                                                                                                                                                                                                                     48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 DLYFILDKSGSV-----LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                LASKKDNEQHVFKVKD-MENLEDVFYQMIDES
                       Thurman, Joshua
Taube, Christian
Gelfand, Erwin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11.2%; Score 105.5; DB 22.6%; Pred. No. 0.0074; tive 44; Mismatches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 44;
                                                                                                                                                                                                                                                    447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 739;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        56
```

and

```
ঠ
                                                     밁
                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                     ; ORGANISM: Homo sapiens
US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Homo sapiens
US-11-057-047-1
                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 1704
SOFTWARE: pt_SEQ_genes Version 1.0
SEQ ID NO 1034
LENGTH: 798
TYPE: No.
                                                                                                                           Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1034, Application US/10821234 Publication No. US20050255114A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 821A
CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR FILING DATE: 2003-04-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Labat,
APPLICANT: Stach
APPLICANT: Andar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR FILING DATE: 2004-12-14
PRIOR FILING DATE: 2004-12-14
PRIOR APPLICATION NUMBER: US04/015040
                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Andarmani, Susan
APPLICANT: Tang, Y. Tom
TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn version 3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Inhibition of Factor B, The Alternative Complement Pathway TITLE OF INVENTION: Methods Related Thereto FILE REFERENCE: 2848-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 7
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       y Match 11.2%; Score 105.5; DB 7; Local Similarity 22.6%; Pred. No. 0.0077; Cocal Similarity 44; Mismatches 75;
                                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    270
                                                     304 NIYLVLDGSDSIGASNFTGAKKCLVNLIEKVASYGVKP--RYGLVTYATYPKIWVKVSEA 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            328 DSSNADWVTKQLNEINYEDHKLKSGTNT-----KKALQAVYSMMSWPDDVPPEGWNRTR 381
                    57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57 --- DREQIRQGLEEL---- QKVLPGGDTYMHEGFERASEQIYYENR----- QGY-RTA 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          764
                                                                                                                             48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 DLYFILDKSGSV-----LHHWNBIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE- 56
                                                                                                                           Similarity 22.0
48; Conservative
---DREQIRQGLEEL----QKYLPGGDTYMHEGFERASEQIYYENR-------QGY-RTA 101
                                                                                         DLYFILDKSGSV-----LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LASKKONEOHVFKVKD-MENLEDVFYOMIDES 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HVIILMTDGLHNMGGDPITVIDEIRDLLYIGKDRKNPREDYLDVYVFGVGPLVNQVNINA 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SVIIALTDG----VKDFNETQ 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NIYLVLDGSDSIGASNFTGAKKCLVNLIEKVASYGVKP--RYGLVTYATYPKIWVKVSEA 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LARIADSKDHVFPVNDGFQALQGIIHSILKKS 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stache-Crain, Birgit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ivan
                                                                                                                                              11.2%;
                                                                                                                           44;
                                                                                                                         Score 105.5; DB 6;
Pred. No. 0.0082;
14; Mismatches 75;
                                                                                                                                                           DB 6;
                                                                                                                                                             Length 798;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              764;
                                                                                                                             45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          45;
                                                                                         56
                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                       US-10-601-368-4
                                                                                                                                                                                                                                                         RESULT 13
                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                339
                                                                                                                                                                                                                                                                                                                                                                                    280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 362 DSSNADWVTKQLNEINYEDHKLKSGTNT-----KKALQAVYSMMSWPDDVPPEGWNRTR 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             48;
```

```
Sequence 6, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                  Sequence 4, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 1141
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SIGNAL
LOCATION: (1)...(22)
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR PILING DATE: 2000-04-27
PRIOR PILINGTON NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: LOTA, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT
FILE REFERENCE: 07334-275001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Pan, Yang APPLICANT: Lora, Jos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US/09/561,263A PRIOR FILING DATE: 2000-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    164 DIVIVLDGSNSI-YPWVEVQHFLINILKKEYIGPGQIQVGVVQYGEDVVHEFHL-NDYRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED-- 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  --KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DSKDHVFPVNDGFQALQG 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LARIADSKDHVFPVNDGFQALQGIIHSILKKS 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HVIILMTDGLHNMGGDPITVIDEIRDLLYIGKDRKNPREDYLDVYVFGVGPLVNQVNINA 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SVIIALTDG------ELHEDLFFYSEREANRSRDLGAIVYCVG--VKDFNETQ 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LASKKONEQHVFKVKD-MENLEDVFYQMIDES 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11.0%; Score 104; DB 6; Length 1141; 24.2%; Pred. No. 0.018;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQLARIA 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   38;
```

```
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: FASTSEQ for Windows Version
; SEQ ID NO 4
; LENGTH: 1166
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-601-368-4
                                                              밁
                                                                                                     S
                                                                                                                                                밁
                                                                                                                                                                                     ઇ
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                   Ş
                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                      US-10-601-368-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-601-368-3
                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 11.0%; Score 104; DB 6; Length 1166; Best Local Similarity 24.2%; Pred. No. 0.019; Matches 48; Conservative 28; Mismatches 84; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 40
SOFTWARE: FRATSEQ for Windows Version 3.0
SEQ ID NO 3
LENGTH: 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/9/561,263A
PRIOR PILING DATE: 2000-04-27
PRIOR PILING DATE: 2000-04-27
PRIOR PILING DATE: 2000-04-27
PRIOR PILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Pan, Yang APPLICANT: Lora, Jos
                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens FEATURE: NAME/KEY: SIGNAL LOCATION: (1)...(22)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
                                                                                                                                                                                                                                                                                                                    / Match 11.0%; Score 104; DB 6; Length 1188;
Local Similarity 24.2%; Pred. No. 0.019;
nes 48; Conservative 28; Mismatches 84; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               142 DIVIVLOGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGVVQYGEDVVHEFHL-NDYRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           317 --KDIVDALGDRIFSLEG 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           258 LEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               200 VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD
                      152
                                                              280 LEKVIQQSERDNYTRYAVAVLGYÝNRRGINPETFLNEÍKÝIASDPDDKHFRNYTDEÁAL- 338
                                                                                                                                                  222 VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD 279
                                                                                                                                                                                                                               61 IROGLEELOKVLPGGDTYMHEGFE---RASEQIYYENROGYRTASVIIALTDGELHED--
                                                                                                                                                                                          61 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIJALTDGELHED-- 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                 3 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DSKDHVFPVNDGFQALQG 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----FNETQLARIA 151
DSKDHVFPVNDGFQALQG 169
                                                                                                        ----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQLARIA 151
                                                                                                                                                                                                                                                                                                                          Indels 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
```

```
APPLICANT: Wehrman, Tom
APPLICANT: Zhang, Jie
APPLICANT: Zhou, Ping
APPLICANT: Cao, Yi-Cheng
APPLICANT: Cao, Yi-Cheng
APPLICANT: Cheng
APPLICANT: Cheng
APPLICANT: Cheng
APPLICANT: Cheng
APPLICANT: Cheng
APPLICANTON: NOVel Nucleic Acids and Polypeptides
FILE REFERENCE: 785C174CN
CURRENT FILING DATE: 2004-11-29
PRIOR APPLICATION NUMBER: 10/291,265
PRIOR FILING DATE: 2002-11-08
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR FILING DATE: 2001-08-03
PRIOR FILING DATE: 2001-01-25
PRIOR FILING DATE: 2000-01-25
PRIOR FILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR FILING DATE: 2000-08-03
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/631,451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
US-11-000-463-338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
Search completed: December 14, 2005, 11:59:30 Job time : 3.65999 BACA
                                                                                                                                                                                           밁
                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                  S
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-11-000-463-338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 338, Appublication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Tang, x 10...
APPLICANT: Liu, Chenghua
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 09/633,870 PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / Match 11.0%; Score 104; DB 7
Local Similarity 24.2%; Pred. No. 0.019;
1es 48; Conservative 28; Mismatches
                                                                                                339 -- KDIVDALGDRIFSLEG
                                                                                                                                            152 DSKDHVFPVNDGFQALQG 169
                                                                                                                                                                                         280 LEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL-
                                                                                                                                                                                                                                                                                                                                                                                  164 DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGFGQIQVGVVQYGEDVVHEFHL-NDYRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           339 --KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                   61 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                                                                                                                                                                 3 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chen, Rui-hong
Qian, Xiaohong
Wang, Zhiwei
                                                                                                                                                                                                                                                                                      VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGKKGAK--KVMIVITDGESHDSPD 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/11000463
5. US20050266423A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for Windows Version 3.0
                                                                                                                                                                                                                                          -----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQLARIA 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
```

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_42_222 943 1 GFDLYFILDKSGSVLHHWNE.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          December 14, 2005, 11:11:02 ; Search time 215.58 Seconds (without alignments) 1160.284 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7861189 segs, 1381955077 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pending_Patents_AA_Main:*
/cgn2_6/ptodata/1/paa/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GFDLYFILDKSGSVLHHWNE.....
: /cgn2_6/ptodata/1/paa/USO75_COMB.pep:*
(cgn2_6/ptodata/1/paa/USO75_COMB.pep:*
(cgn2_6/ptodata/1/paa/USO76_COMB.pep:*
(cgn2_6/ptodata/1/paa/USO76_COMB.pep:*
(cgn2_6/ptodata/1/paa/USO76_COMB.pep:*
(cgn2_6/ptodata/1/paa/USO76_COMB.pep:*
(cgn2_6/ptodata/1/paa/USO79_COMB.pep:*
(cgn2_6/ptodata/1/paa/USO80_COMB.pep:*
(cgn2_6/ptodata/1/paa/USO90_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /cgn2_6/ptodāta71/paa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/paa/US066_COMB.pep:*
/cgn2_6/ptodata/1/paa/US073_COMB.pep:*
/cgn2_6/ptodata/1/paa/US074_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DGFQALQGIIHSILKKSCIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7861189
```

```
44: /cgn2_6/ptodata/1/paa/US600_COMB.pep:*
45: /cgn2_6/ptodata/1/paa/US601_COMB.pep:*
46: /cgn2_6/ptodata/1/paa/US601_COMB.pep:*
47: /cgn2_6/ptodata/1/paa/US603_COMB.pep:*
48: /cgn2_6/ptodata/1/paa/US604_COMB.pep:*
49: /cgn2_6/ptodata/1/paa/US605_COMB.pep:*
50: /cgn2_6/ptodata/1/paa/US606_COMB.pep:*
51: /cgn2_6/ptodata/1/paa/US606_COMB.pep:*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

## Result No. Score Match Length DB ID | Score Match Length DB ID | Sequence 50, Appl 343 100.0 274 1 VCT-US99-31025-50 Sequence 50, Appl 343 100.0 297 24 US-09-471-179-50 Sequence 127. Appl 493 100.0 297 32 US-10-256-899A-2121 Sequence 2121. Appl 50 Sequence 2121. Appl 60 100.0 297 32 US-10-256-897-121 Sequence 2121. Appl 100.0 297 32 US-10-256-897-121 Sequence 2121. Appl 100.0 301 PCT-US99-31025-13 Sequence 2121. Appl 100.0 306 1 PCT-US99-31025-13 Sequence 2121. Appl 100.0 306 1 PCT-US99-31025-13 Sequence 2121. Appl 100.0 306 1 PCT-US99-31025-13 Sequence 2121. Appl 100.0 306 24 US-09-471-179-31 Sequence 2121. Appl 100.0 306 24 US-09-471-179-31 Sequence 2121. Appl 100.0 306 24 US-09-471-179-31 Sequence 2121. Appl 100.0 328 30 US-10-201-222-26 Sequence 22. Appl 100.0 328 30 US-10-201-222-26 Sequence 23. Appl 100.0 328 31 US-10-201-222-26 Sequence 23. Appl 100.0 328 31 US-10-201-222-26 Sequence 23. Appl 100.0 328 31 US-09-471-179-9 Sequence 23. Appl 100.0 328 32 US-09-471-179-9 Sequence 23. Appl 100.0 328 32 US-09-471-179-9 Sequence 23. Appl 100.0 328 32 US-09-471-179-9 Sequence 23. Appl 100.0 328 32 US-09-471-179-9 Sequence 23. Appl 120 US-09-471-179-9 Sequence 23. Appl 120 US-09-471-179-9 Sequence 23. Appl 120 US-09-471-179-9 Sequence 23. Appl 120 US-09-471-179-9 Sequence 23. Appl 120 US-09-471-179-9 Sequence 23. Appl 120 US-09-471-179-9 Sequence 23. Appl 120 US-09-471-179-9 Sequence 23. Appl 120 US-09-471-179-9 Sequence 23. Appl 120 US-09-471-179-9 Sequence 23. Appl 120 US-09-471-179-9 Sequence 23. Appl 120 US-09-371-179-9 Sequence 23. Appl 120 US-09-371-179-9 Sequence 23. Appl 120 US-09-371-179-9 Sequence 23. Appl 120 US-09-371-179-3 Sequence 23. Appl 120 US-09-371-179-3 Sequence 23. Appl 120 US-09-371-179-3 Sequence 23. Appl 120 US-09-371-179-3 Sequence 23. Appl 120 US-09-371-179-3 Sequence 23. Appl 120 US-09-371-179-3 Sequence 23. Appl 120 US-09-371-179-3 Sequence 23. Appl 120 US-09-371-179-3 Sequence 23. Appl 120 US-09-371-179-3 Sequence 23. Appl 120 US-09-371-179-3 Sequence 23. Appl 120 US-09-371-179-3 Seq

ALIGNMENTS

RESULT 1
PCT-US99-31025-50
; Sequence 50, Application PC/TUS9931025
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceticals, Inc.

that Ex

```
FILE REFERENCE: 7853-173-228

CURRENT APPLICATION NUMBER: PCT/US99/31025

CURRENT FILING DATE: 1999-12-23

EARLIER APPLICATION NUMBER: 09/223,546

EARLIER FILING DATE: 1998-12-30

NUMBER OF SEQ ID NOS: 135

SOFTWARE: FRSTSEQ for Windows Version 4.0

SEQ ID NO 50

LENGTH: 274

TYPE: PRT

ORGANISM: Homo sapiens

PCT-US99-31025-50
                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: HOLTZMAN, DOUGLAS
TITLE OF INVENTION: SECRETED PROTEINS AND NUCLEIC ACIDS ENC
FILE REFERENCE: 7853-173
CURRENT APPLICATION NUMBER: US/09/471,179
CURRENT FILING DATE: 1999-12-23
PRIOR APPLICATION NUMBER: 09/223,546
PRIOR APPLICATION NUMBER: 09/223,546
PRIOR FILING DATE: 1998-12-30
NUMBER OF SEQ ID NOS: 135
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 50
LENGTH: 274
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                    밁
                                                                      á
                                                                                                              밁
                                                                                                                                                 Ś
                                                                                                                                                                                         밁
                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-471-179-50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.
Matches 181; Conservative
                                                                                                                                                                                                                                                                    Query Match 100.0%; Score 943; DB 24; Best Local Similarity 100.0%; Pred. No. 3.3e-92; Matches 181; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 50, Application US/09471179 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: SECRETED PROTEINS AND NUCLEIC ACIDS TITLE OF INVENTION: ENCODING THEM
                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI
181
                                    135
                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              195 E 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181 E 181
                                                                                                              75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 IROGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15
                                                                                                                                                   19
                                                                                                                                                                                         15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                               μ
                                                                                                                                                                                                               GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                          EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI 180
                                                                                                                                                                                         GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
M
                                    EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                              IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                       IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IROGLEELOKVLPGGDTYMHEGFERASEQIYYENROGYRTASVIIALTDGELHEDLFFYS
181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 943; DB 1; 100.0%; Pred. No. 3.3e-92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                            DB 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 274;
                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ENCODING
                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>..</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            74
                                                                                                                134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                        0
```

```
APPLICATION HYGER TOC.
TITLE OF INVENTION: NOVEL NUCLEIC ACID and Pol FILE REFERENCE: 784FLPCT
CURRENT APPLICATION NUMBER: US/09/488,725A
CURRENT FILING DATE: 2000-01-21
PRIOR PILING DATE: 2000-01-21
PRIOR PILING DATE: 2000-01-21
PRIOR PILING DATE: 2000-06-20
PRIOR PILING DATE: 2000-06-20
PRIOR PILING DATE: 2000-06-20
PRIOR PILING DATE: 2000-07-19
PRIOR PILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: US09/620,312
PRIOR APPLICATION NUMBER: US09/620,312
PRIOR APPLICATION NUMBER: US09/620,312
PRIOR APPLICATION NUMBER: US09/620,312
PRIOR APPLICATION NUMBER: US09/623,450
PRIOR PILING DATE: 2000-08-31
PRIOR PILING DATE: 2000-09-14
PRIOR FILING DATE: 2000-09-14
PRIOR APPLICATION NUMBER: US09/693,036
PRIOR FILING DATE: 2000-09-14
PRIOR APPLICATION NUMBER: US09/693,036
PRIOR APPLICATION NUMBER: US09/693,036
PRIOR APPLICATION NUMBER: US09/727,344
PRIOR APPLICATION NUMBER: US09/727,344
PRIOR FILING DATE: 2000-10-19
PRIOR APPLICATION NUMBER: US09/727,344
PRIOR APPLICATION NUMBER: US09/727,344
PRIOR FILING DATE: 2000-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 3
US-60-561-086-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-488-725A-2121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-60-561-086-16
NUMBER OF SEQ ID NOS: 7144

SOFTWARE: pt_FL_genes_b Versio:
SEQ ID NO 2121

LENGTH: 298

Type: """
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/60/561,086
CURRENT FILING DATE: 2004-04-08
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PatentIn version 3.1
SEQ ID NO 16
LENGTH: 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 16, Application US/60561086
GENERAL INFORMATION:
APPLICANT: Entage, Peter
APPLICANT: Tang, Y. Tom
TITLE OF INVENTION: Methods of Therapy and Diagnosis Using
TITLE OF INVENTION: TEM8 Protein
FILE REFERENCE: NUVO-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 181; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 293
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      195 E 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         135 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      75 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 943; DB 49; ilarity 100.0%; Pred. No. 3.6e-92; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/09488725A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             293;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Targeting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of Cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

```
밁
                                                            á
                                                                                                         밁
                                                                                                                                                ફ
                                                                                                                                                                                           밁
                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                             / TYPE: PRT
; ORGANISM: Homo sapiens
US-10-258-898A-2121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/258,898A
CURRENT FILING DATE: 2002-10-29
PRIOR APPLICATION NUMBER: US/09/488,725
PRIOR FILING DATE: 2000-01-21
PRIOR PHILING DATE: 2000-04-25
PRIOR PHILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: US09/552,317
PRIOR PHILING DATE: 2000-06-20
PRIOR FILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: US09/620,312
PRIOR APPLICATION NUMBER: US09/620,312
PRIOR APPLICATION NUMBER: US09/653,450
PRIOR APPLICATION NUMBER: US09/653,450
PRIOR APPLICATION NUMBER: US09/653,450
PRIOR PRIOR DATE: 2000-09-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
US-10-258-898A-2121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens
US-09-488-725A-2121
                                                                                                                                                                                                                                                                                               Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: pt_FL_genes_b
SEQ ID NO 2121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2121, Appli GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 181;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2000-10-19
PRIOR APPLICATION NUMBER: US09/727,344
PRIOR FILING DATE: 2000-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: 784FLPCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Hyseq Inc
TITLE OF INVENTION: Novel Nucleic Acid and Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 7143
                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US09/693,036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US09/662,191
FILING DATE: 2000-09-14
                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              102
                              162
                                                                                                            102
                                                                                                                                                                                                                                                                           181;
                                                                                                                                                  13
                                                                                                                                                                                           42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              42
                                                                                                                                                                                                                                    -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                   EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI 180
                                                                                                                                   IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                   GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ 101
                                                                                                                                                                                         GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                         100.0%; Score 943; DB 32; ilarity 100.0%; Pred. No. 3.7e-92; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/10258898A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Versions 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 943; DB 24;
Pred. No. 3.7e-92;
); Mismatches 0;
                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                  120
                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              161
                                                                                                         161
                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                      RESULT 7
PCT-US99-31025-132
                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                        뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 6
US-10-286-897-2121
TITLE OF INVENTION: SECRETED PROTEINS AND TITLE OF INVENTION: ENCODING THEM FILE REFERENCE: 7853-173-228
FULE REFERENCE: 7853-173-28
FULE REFERENCE: 7853-173-28
FULE REFERENCE: 1999-12-23
FURENT FILING DATE: 1999-12-23
FERLIER APPLICATION NUMBER: 09/223,546
FERLIER FILING DATE: 1998-12-30
FUMBER OF SEQ ID NOS: 135
SOFTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Homo sapiens 
US-10-286-897-2121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 2002-11-01
PRIOR APPLICATION NUMBER: US/09/488,725
PRIOR APPLICATION NUMBER: US/09/488,725
PRIOR FILING DATE: 2000-01-21
PRIOR FILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: US/09/598,042
PRIOR PILING DATE: 2000-06-20
PRIOR PILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: US/09/620,312
PRIOR FILING DATE: 2000-07-19
PRIOR FILING DATE: 2000-09-14
PRIOR PILING DATE: 2000-09-14
PRIOR PILING DATE: 2000-09-14
PRIOR PILING DATE: 2000-10-19
PRIOR PILING DATE: 2000-10-19
PRIOR APPLICATION NUMBER: US/09/693,036
PRIOR APPLICATION NUMBER: US/09/693,036
PRIOR APPLICATION NUMBER: US/09/727,344
PRIOR FILING DATE: 2000-10-19
PRIOR FILING DATE: 2000-11-29
PRIOR FILING DATE: 2000-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                       Sequence 132, Application PC/TUS9931025
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceticals,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 7143
SOFTWARE: pt FL genes_b Versions 1.0
SEQ ID NO 2121
LENGTH: 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2121, Appl GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Novel Nucleic Acid and FILE REFERENCE: 784FLPCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/286,897
CURRENT FILING DATE: 2002-11-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Hyseq Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 29
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                          222 E 222
                                                                                                                                                                                                                                                                                                                                                                               181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                          162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          102 TROGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 IRQGLEELQKYLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                          EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                  EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 943; DB 32; ilarity 100.0%; Pred. No. 3.7e-92; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/10286897
                                                                                                         PCT/US99/31025
                                                                                                                                                                      AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 297;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

161

221

60

0

```
APPLICANT: HOILTAIN, Douglas
FITTE OF INVENTION: SECRETED PROTEINS AND NUCLEIC ACI
FILE REFERENCE: 7853-173
CURRENT APPLICATION NUMBER: US/09/471,179
CURRENT FILING DATE: 1999-12-23
PRIOR APPLICATION NUMBER: 09/223,546
PRIOR APPLICATION NUMBER: 09/223,546
PRIOR FILING DATE: 1998-12-30
NUMBER OF SEQ ID NOS: 135
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 132
LENGTH: 301
TYPE: PRT
ORGANISM: Homo sapiens
US-09-471-179-132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-471-179-132; Sequence 132, Application US/09471179; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                   S
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; LENGTH: 301
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US99-31025-132
                                                          RESULT 9
PCT-US99-31025-30
                                                                                                                                                                                  밁
                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 132
LENGTH: 301
Sequence 30, Application PC/TUS9931025 GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceticals,
TITLE OF INVENTION: SECRETED PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 181; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 181; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            102 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                              102
                                                                                                                                                                                    162
                                                                                                                                                                                                                121
                                                                                                                        222
                                                                                                                                                      181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42
                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                         42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                         GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                              IROGLEELOKVLPGGDTYMHEGFERASEOIYYENROGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                    EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                        Ħ
                                                                                                                                                                                    EREANRSRDLGAI VYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         222
                                                                                                                        222
                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                     Score 943; DB 24;
Pred. No. 3.8e-92;
D; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 943; DB 1;
Pred. No. 3.8e-92;
Mismatches 0;
 Inc.
AND NUCLEIC ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 301;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                 Length 301;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENCODING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     221
                                                                                                                                                                                       221
                                                                                                                                                                                                                                                                                                                                                                       0
```

```
FILE REFERENCE: 7853-173-228
CURRENT APPLICATION NUMBER: PCT/US99/31025
CURRENT FILING DATE: 1999-12-23
EARLIER APPLICATION NUMBER: 09/223,546
EARLIER FILING DATE: 1998-12-30
NUMBER OF SEQ ID NOS: 135
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 30
LENGTH: 306
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 51, Application PC/TUS9931025
(GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceticals, Inc.
TITLE OF INVENTION: SECRETED PROTEINS AND NUC
TITLE OF INVENTION: ENCODING THEM
FILE REFERENCE: 7853-173-228
(CURRENT APPLICATION NUMBER: PCT/US99/31025
(CURRENT FILING DATE: 1999-12-23
EARLIER APPLICATION NUMBER: 09/223,546
EARLIER FILING DATE: 1998-12-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
PCT-US99-31025-51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                  ş
                                                                       밁
                                                                                                                                           몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
밁
                                                                                                    S
                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                      ; ORGANISM: Homo sapiens PCT-US99-31025-51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCT-US99-31025-30
                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 135
SOFTWARE: FastSEQ for Wind
SEQ ID NO 51
LENGTH: 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Sin
Matches 181;
                                                                                                                                                                                                                Query Match 100.0%; Score 943; DB 1; Best Local Similarity 100.0%; Pred. No. 3.9e-92; Matches 181; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: ENCODING THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                         TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                135
     135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             195 E 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                       121 EREANRSRDLGAIVYCYGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15
                                                                         75
                                                                                           61 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                            15 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                         IROGLEELOKVLPGGDTYMHEGFERASEQIYYENROGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                  GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IROGLEELOKVLPGGDTYMHEGFERASEQIYYENROGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 943; DB 1; illarity 100.0%; Pred. No. 3.9e-92; Conservative 0; Mismatches 0.
                                                                                                                                                                                                                                                                                                                                                                              for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUCLEIC ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 306;
                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194
                                                                                                               120
                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                74
                                                                            134
                                                                                                                                                                                                                      0
```

S

181

· 🗷

밁

```
Sequence 30, Application US/09471179

GENERAL INFORMATION:
APPLICANT: Holtoman, Douglas
ITITLE OF INVENTION: SECRETED PROTEINS AND NUCLEIC ACIDS ENCODING THEM
FILE REFERENCE: 7853-173
CURRENT APPLICATION NUMBER: US/09/471,179
CURRENT APPLICATION NUMBER: 09/223,546
PRIOR APPLICATION NUMBER: 09/223,546
PRIOR FILING DATE: 1998-12-30
INUMBER OF SEQ ID NOS: 135
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 30
LENGTH: 306
TYPE: PRT
ORGANISM: Homo sapiens
US-09-471-179-30
                                                                                                                                                                                                                                              Sequence 51, Application US/09471179

GENERAL INFORMATION:

APPLICANT: HOLEZMAN, DOUGLAB

FITTLE OF INVENTION: SECRETED PROTEINS AND NUCLEIC ACIDS ENCODING THEN

FILE REFERENCE: 7853-173

CURRENT APPLICATION NUMBER: US/09/471,179

CURRENT FILING DATE: 1999-12-23

PRIOR APPLICATION NUMBER: 09/223,546

PRIOR FILING DATE: 1998-12-30

NUMBER OF SEQ ID NOS: 135

SOPTMARE: FastSEQ for Windows Version 4.0

SEQ ID NO 51

LENGTH: 306
                        Ś
                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
밁
                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-471-179-51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
US-09-471-179-30
                                                                                                                                Query Match 100.0%; Score 943; DB 24; Length 306; Best Local Similarity 100.0%; Pred. No. 3.9e-92; Matches 181; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.
Best Local Similarity 100.
Matches 181; Conservative
                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo sapiens
-09-471-179-51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   y Match 100.0%; Score 943; DB 24; Local Similarity 100.0%; Pred. No. 3.9e-92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               195 E 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               75
75
                             61
                                                               15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15
                                                               1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                      IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    306;
                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                         THEM
                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                             120
                                                               74
                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
```

```
RESULT 14
US-10-201-292-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 13
US-10-038-307-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                US-10-201-292-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-038-307-26
                                                                                                                                                                                                      Sequence 26, Application US/10201292
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
                                                                                                                                         NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 26
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 181;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Bngin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
                                                                               LENGTH: 328
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      222 E 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        102 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 195 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 EREANRSRDIGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 IROGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     42 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GFDLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQ 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        h 100.0%; Score 943; DB 30;
Similarity 100.0%; Pred. No. 4.3e-92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/10038307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                   for Windows Version
  100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
  Score 943; DB 32;
Pred. No. 4.3e-92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 328;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
RESULT 15

US-10-201-292A-26

US-10-201-292A-26

Sequence 26, Application US/10201292A

GENERAL INFORMATION:

APPLICANT: Millennium Pharmaceuticals, Inc.

APPLICANT: James B. Rottman

APPLICANT: Theresa L. O'keefe

APPLICANT: Engin Ozkaynak

APPLICANT: Judith J. Healey

TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and

TITLE OF INVENTION: Methods

FILE REFERENCE: MPI01-307CP1M

CURRENT FILING DATE: 2002-07-24

PRIOR APPLICATION NUMBER: US/10/201,292A

CURRENT FILING DATE: 2002-07-24

PRIOR APPLICATION NUMBER: US 10/038,307

PRIOR FILING DATE: 2001-12-20

NUMBER OF SEQ ID NOS: 67

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 26

LENGTH: 328

TYPE: PRT

ORGANISM: Homo Sapiens

US-10-201-292A-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
Search completed: December 14, 2005, 11:50:58 Job time : 216.58 secs
                                                                                                                               ঠ
                                                                                                                                                               밁
                                                                                                                                                                                   5
                                                                                                                                                                                                                                              δ
                                                       밁
                                                                           δ
                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 181; Conservative
                                                                                                                                                                                                                                                                         Query Match 100.0%; Score 943; DB 32; Best Local Similarity 100.0%; Pred. No. 4.3e-92; Matches 181; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181 E 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               222 E 222
                                                                                                                                                              102 IROGLEELOKVLPGGDTYMHEGFERASEQIYYENROGYRTASVIIALTDGELHEDLFFYS
                                                                                 181
                                                                                                            162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            222 E 222
                                                                                                                            121 ERBANNSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSILKKSCI 180
                                                                                                                                                                                 61 IRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYS 120
                                                                                                                                                                                                                      42
                                                                                                                                                                                                                    E 181
                                                                                                           EREANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSILKKSCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>,,</u>
                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                          101
                                                                                                                                                                     161
                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
```

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -MODEL-frame+_p2n.model -DEV=xlh
-Q-/cgn2 1/USPTO_spool/US09970076/runat_14122005_111852_21035/app_query.fasta_1.2410
-DB=PublIshed_Applications_NA_Main -QFMT=fastap -SUFFIX=rnpbm -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -CUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=2000000000 -USER=US09970076_@CGN 1 1 2715_@runat 14122005_111852_21035
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Command line parameters:
-MODEL=frame+_p2n.model .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                    Score
                                                                                                                                                                                                                                                                                                                                                                                           Published_Applications_NA_Main:*

1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*

2: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

7: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

10: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                               Match
    100.0
100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2_COPY_42_222
943
                                                                                                                                                                                                                             Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           December 18, 2005, 07:35:12; Search time 579.877 Seconds (without alignments)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9793542 seqs, 4134689005 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GFDLYFILDKSGSVLHHWNE......DGFQALQGIIHSILKKSCIE 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Copyright
                                                                                                                                                                                                  Length
    1008
1008
1047
1047
1056
1056
1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                    BB
US-10-038-307-25

US-10-201-292-25

US-10-038-307-21

US-10-201-292-21

US-10-038-307-23

US-10-201-292-27

US-10-201-292-27

US-10-201-292-29
                                                                                                                                                                                                    ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 summaries
                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (without alignments)
2581.163 Million cell updates/sec
Sequence 25,
Sequence 21,
Sequence 21,
Sequence 23,
Sequence 23,
Sequence 27,
Sequence 27,
                                                                                                                                                                                               Description
δ
```

```
1000.0
1000.0
1000.0
1000.0
1000.0
                   100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
   US-10-133-937-58
US-10-159-563-58
US-10-201-292-33
US-10-201-292-33
US-10-201-292-35
US-10-117-722-8
US-10-117-722-8
US-10-10-31-307-11
US-10-038-307-11
US-10-038-307-15
US-10-038-307-15
US-10-038-307-15
US-10-201-292-15
US-10-201-292-17
US-10-201-292-17
US-10-201-292-17
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
US-10-038-307-19
                                US-09-796-753-11
US-10-038-307-1
US-10-038-307-1
US-10-198-846-9957
US-99-918-715-176
US-09-918-715-298
US-09-918-715-298
US-10-474-794-176
US-10-474-794-231
US-10-979-159-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-11-047-278-1
Sequence 1, Appli sequence 58, Appli sequence 31, Appl sequence 33, Appli sequence 8, Appli sequence 8, Appli sequence 8, Appli sequence 11, Appl sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 15, Appli sequence 15, Appli sequence 15, Appli sequence 17, Appli sequence 17, Appli sequence 17, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli sequence 231, Appli se
```

## ALIGNMENTS

```
Sequence 25, Application US/10038307

Publication No. US20030134786A1

GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: JUdith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-66-28
NUMBER OF SEQ ID NOS: 26
SOFTMARE: FastSEQ for Windows Version 4.0
SEQ ID NO 25
LENGTH: 1008
TYPE: DNA
ORGANISM: Homo sapiens
                                     Percent Similarity:
Best Local Similarity:
Query Match:
DB:
US-09-970-076-2_COPY_42_222 (1-181) x US-10-038-307-25 (1-1008)
                                                                                                        Score:
                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1
US-10-038-307-25
                                                                                                                          No
:
                                                 1.71e-116
943.00
100.00%
100.00%
100.00%
                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                      181
```

```
; LENGTH: 1008
; TYPE: DNA
; ORGANISM: Homo s
US-10-201-292-25
                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 2
US-10-201-292-25
; Sequence 25, Application US/10201292
; Publication No. US20030144193A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
밁
                           8
                                                       US-09-970-076-2_COPY_42_222
                                                                                                                                                                    Alignment Scores: Pred. No.:
                                                                                                                                                       Score:
                                                                                                                                                                                                                                                                       APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Undith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and FILE REFERENCE: 7853-253-299
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 25
IFECTIV. 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            676
 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                              -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PhelleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT
                   GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATTTCAATGAGACACAGCTGGCCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTG
   GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAA 195
                                                                                                                                                                                                                                 sapiens
                                                                                                      1.71e-116
943.00
100.00%
100.00%
100.00%
                                                            (1-181)
                                                            ×
                                                            US-10-201-292-25 (1-1008)
                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                         1008
181
0
                                                                                                                                                                                                                                                                                                                                                                            Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        195
                                                                                                                                                                                                                                                                          Sequence 21, Application US/10038307

Sequence 21, Application US/20030134786A1

GENERAL INFORMATION:

APPLICANT: James B. ROTTMAN

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Engin OZKAYNAK

APPLICANT: Judith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Met.

FILE REFERENCE: 7853-253-999

FULE REFERENCE: 7853-253-999

CURRENT APPLICATION UMMBER: US/10/038,307

CURRENT APPLICATION UMMBER: US/10/038,307

CURRENT FILING DATE: 2002-06-28

NUMBER OF SEQ ID NOS: 26

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 21

LENGTH: 1047

TYPE: DAN

OPERALTSN. 4000 Seriens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 3
US-10-038-307-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                            á
                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
   Ś
                                 밁
                                                                                         US-09-970-076-2_COPY_42_222 (1-181) x US-10-038-307-21 (1-1047)
                                                                                                                                                                                                                                                  ; ORGANISM: Homo US-10-038-307-21
                                                                                                                                                                                                         Pred. No.:
                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316 ATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         616 AATGACGGCTTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141 AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                256
                                   163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
    21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IleArgGlnGlyLeuGluCluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AsnAspGlyPhcGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
   IleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSer 40
                                                       GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               678
                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                         1.82e-116
943.00
100.00%
100.00%
                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                            1047
181
0
0
```

Methods

20

222

140

675 180 615 160 555 120 435 100

495

80 315 60 255

402

140

522

582

180

642

702

160

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                      र्
                                                           밁
                                                                                     र्
                                                                                                                                                                                                                   Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 4
US-10-201-292-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
 밁
                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens
US-10-201-292-21
                                                                                                                       US-09-970-076-2_COPY_42_222 (1-181) x US-10-201-292-21 (1-1047)
                                                                                                                                                                                                                                                                                                                                                                    Sequence 21, Application US/10201292
Publication US/030144193A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-99
CURRENT APPLICATION UNMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
                                                                                                                                                                                                                                                                                                          SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 21
LENGTH: 1047
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         343
 223
                                                             163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4
                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr 100
IleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSer 40
                                                                           GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAA 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Glu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGAACAA 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATGACGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln 60
                                                                                                                                                                   1.82e-116
943.00
100.00%
100.00%
100.00%
                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            462
                                                             222
                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 282
                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
US-10-038-307-23
                      문
                                                        S
                                                                                            밁
                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                  US-09-970-076-2_COPY_42_222 (1-181) x US-10-038-307-23 (1-1056)
                                                                                                                                                                                                                                                                                                               US-10-038-307-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                  Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:

APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Uddith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 23
LENGTH: 1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 23, App
Publication No.
                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo
                                                                                            136 GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101 AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       343
                              196 ATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 Glu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    283
                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
41 PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                              IleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSer
                                                                                                             GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAA 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/10038307
                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                         1.84e-116
943.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                   Conservative: Mismatches: Indels:
                                                                                                                                                                                        0000
```

60 255 40 195

Mon

```
RESULT 6
US-10-201-292-23
; Sequence 23, Application US/10201292
; Publication No. US20030144193A1
; GENERAL INFORMATION:
; APPLICANT: James B. ROTTWAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Undith J. HEALEY
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-99
CURRENT APPLICATION NUMBER: US/10/201,292
; CURRENT FILING DATE: 2003-02-14
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 23
; LENGTH: 1056
; TYPE: DNA
; ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                    á
                                            밁
                                                                   á
                                                                                                                ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            묽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                          밁
밁
                                                                                                                                      US-09-970-076-2_COPY_42_222 (1-181) x US-10-201-292-23 (1-1056)
                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                                                                                            US-10-201-292-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161 AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
256
                                             196
                                                                                           136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                    41
                                                                   21
                                                                                                                   _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Glu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATTTCAATGAGACACAGCTGGCCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAA 678
PhelleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln 60
                                                         GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAA
                                                                                                                                                                           1.84e-116
943.00
100.00%
100.00%
100.00%
                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                1056
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                              255
                                                                                              195
                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                            Ş
                                                                                             Ş
                                                                                                                                         Ś
 S
                       밁
                                                                       밁
                                                                                                                    吊
                                                                                                                                                                                                                                          Score:
                                                                                                                                                                                                                                                     No.:
```

```
; LENGTH: 1401
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-201-292-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 7
US-10-201-292-27
                                                                                                                                                                                                                    US-09-970-076-2_COPY_42_222 (1-181) x US-10-201-292-27
                                                                                                                                                                                                                                                          Query Match:
DB:
                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: JUDITH J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
1 Tencrut. 1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 27, Application US/10201292
Publication No. US20030144193A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 Glu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                  256
                                                                                                  196
                                                                                                                                                              136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    676 GAA 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
61 IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis 80
                                                              41
                                                                                              ASDASPG1yPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleargGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
                                                    PhelleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                          2.84e-116
943.00
100.00%
100.00%
100.00%
6
                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                           1401
181
0
0
                                                                                                                                                                                                                            (1-1401)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            495
                                                                      60
                                                                                                   255
                                                                                                                                 40
                                                                                                                                                                 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   513
                                                                                                                                                                                               20
                                       315
```

615

675 180 140

495

555

435

```
RESULT 8

US-10-201-292-29

Sequence 29, Application US/10201292

Publication No. US20030144193A1

GENERAL INFORMATION:

APPLICANT: James B. ROTTMAN

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Login OZKANYAK

APPLICANT: Judith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Con

FILE REFERENCE: 7853-253-999

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT FILING DATE: 2003-02-14

NUMBER OF SEO ID NOS: 36

SOFTWARE: FastSEO for Windows Version 4.0

SEO ID NO 29

LENGTH: 1401

TYPE: DAN

ORGANISM: Homo sapiens

US-10-201-292-29
                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                             US-09-970-076-2_COPY_42_222 (1-181) x US-10-201-292-29 (1-1401)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             496
       316
                                                                         256
                                                                                                                                            196
                                                                                                                                                                                                              136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     316
                                   61
                                                                                                         41
                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                              ب
                                                                                                                                                            IleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSer 40
                                                                                                                                                                                                                             GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ### ATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT
     ATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT
                                                                                         PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                             GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GA
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr 100
                     IleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGACGGC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       678
                                                                                                                                                                                                                                                                                                                               2.84e-116
943.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           160
                                     80
                                                                                                       60
                                                                                                                                                                                                             195
     375
                                                                       315
                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 495
                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA; ORGANISM: Homo mapiens; PEATURE; PEATURE; NAME/KEY: CDS; LOCATION: (104)..(1207) US-11-047-278-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/11047278

Publication No. US20050196407A1

GENERAL INFORMATION:
APPLICANT: Young, John A.T.
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296, 97745

CURRENT APPLICATION NUMBER: US/11/047,278

CURRENT FILING DATE: 2005-01-31

PRIOR APPLICATION NUMBER: US/9970,076

PRIOR APPLICATION NUMBER: 00/251,481

PRIOR FILING DATE: 2000-12-05

PRIOR FILING DATE: 2000-12-05

PRIOR FILING DATE: 2000-12-05

PRIOR FILING DATE: 2000-12-05

PRIOR FILING DATE: 2000-12-05

PRIOR FILING DATE: 2000-12-05

PRIOR PRIOR FILING DATE: 2000-12-05
                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
                                                   밁
                                                                                S
                                                                                                                         밁
                                                                                                                                                    Ś
                                                                                                                                                                                     US-09-970-076-2_COPY_42_222 (1-181)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                   Ş
                                                                                                                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                                                                                                                Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-11-047-278-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Ver. SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 1414
                                                       287
                                                                                                                         227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                     41
                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18
                                                                                                                                                           \vdash
                                                     GAA
PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                         GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAA
                                                                                                                                                GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCCATGAAGATCTCTTTTTCTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       678
                                                                                                                                                                                                                             2.88e-116
943.00
100.00%
100.00%
100.00%
100.00%
                                                                                                                                                                                             ×
                                                                                                                                                                                             US-11-047-278-1 (1-1414)
                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                             1414
181
0
0
0
```

ફ 밁 र् 밁 ş

밁

8

용 श्च

밁

밁

Ş 밁

र् 밁 ঠ 문 ş 밁 ঠ

40

286 20

60 346

밁

445

565 100 505

160

685 140 625 120

180

745

805

```
RESULT 10
US-11-047-278-9
US-11-047-278-9
; Sequence 9, Application US/11047278
; Publication No. US20050196407A1
; Publication No. US20050196407A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR FILING DATE: 2005-01-31
PRIOR PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: 03/251,481
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOPTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
á
                                  밁
                                                                                                   US-09-970-076-2_COPY_42_222 (1-181) x US-11-047-278-9 (1-1436)
                                                                                                                                             Query Match:
DB:
                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                    Pred. No.:
                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                       US-11-047-278-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 9
                                                                                                                                                                                                                                                                                                    FEATURE:
NAME/KEY: CDS
LOCATION: (380)..(1033)
                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                            ENGTH: 1436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     767
                                    266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
   21
                                                                     _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Glu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAA
                                                          GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAA 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAA
 IleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSer 40
                                      GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATGACGGC
                                                                                                                                           2.95e-116
943.00
100.00%
100.00%
100.00%
                                                                                                                                           Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                 Length:
Matches:
                                                                                                                                           1436
181
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     466
                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   706
                                                                                                                                                                                                                                                                                         APPLICANT: Khan, Javed
APPLICANT: Ringner, Markus
APPLICANT: Peterbon, Carsten
APPLICANT: Meltzer, Paul
APPLICANT: Meltzer, Paul
APPLICANT: Meltzer, Paul
APPLICANT: Meltzer, Paul
TITLE OF INVENTION: METHODS FOR ANALYZING HIGH DIMENSIONAL DATA FOR CLASSIFYING,
TITLE OF INVENTION: DIAGNOSING, PROGNOSTICATING, AND/OR PREDICTING DISEASES AND
TITLE OF INVENTION: OTHER BIOLOGICAL STATES
FILE REFERENCE: 11613.56US01
CURRENT APPLICATION NUMBER: US/10/133,937
CURRENT APPLICATION DIMER: US/10/133,937
CURRENT FILING DATE: 2002-11-04
NUMBER OF SEQ ID NOS: 99
SOFTWARE: Patentin version 3.1
SEQ ID NO 58
LENGTH: 1454
TYPE: DNA
COCANTSM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                      밁
                                                                     S
                                                                                                                                                                                                                                                                                         ; ORGANISM: Homo US-10-133-937-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-133-937-58
     S
                                                                                                       US-09-970-076-2_COPY_42_222 (1-181) x US-10-133-937-58 (1-1454)
                                                                                                                                                                                                                       Score:
                                                                                                                                                                                                                                       Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 58, Application US/10133937 Publication No. US20030207278A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                          267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      806 GAA 808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41
     21 IleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSer
                                                                           μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AlaSerValI1eI1eAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Glu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAA
                                          GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAA
                                                                  GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu
                                                                                                                                                                3e-116
943.00
100.00%
100.00%
                                                                                                                                                                                    Conservative: Mismatches:
                                                                                                                                                                   Indels:
```

1454 181 0 0

40 326

```
APPLICANT: Khan, Javed
APPLICANT: Ringner, Markus
APPLICANT: Peterson, Carsten
APPLICANT: Meltzer, Paul
ITLE OF INVENTION: SELECTIONS OF GENES AND METHODS OF USING THE SAME FOR
TITLE OF INVENTION: DIAGNOSIS AND FOR TARGETING THE THERAPY OF SELECT CANCERS
FILE REFERENCE: 11613.56US11
CURRENT APPLICATION NUMBER: US/10/159,563
CURRENT FILING DATE: 2002-12-09
PRIOR APPLICATION NUMBER: US 10/133,937
PRIOR PAPPLICATION NUMBER: US 10/133,937
PRIOR SEQ ID NO 58
LENGTH: 1454
TYPE: DNA
ORGANISM: Homo Bapiens
US-10-159-563-58
              밁
                              र्
                                                     US-09-970-076-2_COPY_42_222
                                                                                      Score:
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 12
US-10-159-563-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                  Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                 Sequence 58, Application US/10159563 Publication No. US20040009154A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          507
               267
                                                                                                                                                                                                                                                                                                                                                                                                                                     807
                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41
             GA
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleArgGlnGlyLeuGluCeuGlnLysValLeuProGlyGlyAspThrTyrMetHis 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAGGATTTGAAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA 566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAA 446
                                                                                                                                                                                                                                                                                                                                                                                                                                     809
                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                              3e-116
943.00
100.00%
100.00%
100.00%
                                                         (1-181)
                                                       ×
                                                         US-10-159-563-58
                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                         (1-1454)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              160
              326
                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    989
                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
            ş
                            B
                                                    á
                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
US-10-201-292-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                                                                                                      US-10-201-292-31
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                  SEQ ID NO 31
                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                      LENGTH: 1464
                                   136
                                                                                                                                                                                                                                                                                                                                                                                                                        807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         447
                                                                                                                                                                                                                                                                                                                                                                                                                                             181 Glu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               327
81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                                                                                                                                                                        GAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                        . 809
```

```
Sequence 31, Application US/10201292
Publication No. US20030144193A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: LOUGHT OZKAYNAK
APPLICANT: JUNGTH OZKAYNAK
APPLICANT: JUNGTH OZKAYNAK
APPLICANT: JUNGTH OZKAYNAK
APPLICANT: JUNGTH OZKAYNAK
APPLICANT: JUNGTH OZKAYNAK
APPLICANT: NUMBER: US/10/201,292
CURRENT FILLING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PastSEQ for Windows Version 4.0
                                                                                                             US-09-970-076-2_COPY_42_222 (1-181) x US-10-201-292-31 (1-1464)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                     GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAA
                                                          GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluargGlualaasnargSerargAspLeuGlyalaIleValTyrCysValGlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCC
                                                                                                                                                                                                                                                                                                                                          Bapiene
                                                                                                                                                         3.04e-116
943.00
100.00%
100.00%
100.00%
6
                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          216 Compositions
                                                                                                                                                       1464
181
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      140
                                     195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           386
40
                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              446
```

315

60

100 375

495 120 435

140

180

675

160 555

615

```
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYAKA
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Cor
FILE REFERENCE: 7853-253-99
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 33
LENGTH: 1534
TYPE: DNA
ORGANISM: Homo sapiens
US-10-201-292-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-201-292-33
; Sequence 33, Application US/10201292
; Publication No. US20030144193A1
; GENERAL INFORMATION:
                                                                                                                                                                      Best I
Query
DB:
                                                                          밁
                                                                                                                                 US-09-970-076-2_COPY_42_222 (1-181) x US-10-201-292-33 (1-1534)
                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                   Score:
                                                                                                                                                                                                                                                Alignment Scores Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                          136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41
                196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13
                                           21
                                                                                                         Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Glu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCC
                                                                                            GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAA
                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             678
                                                                                                                                                                                    3.26e-116
943.00
100.00%
100.00%
100.00%
                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Compositions and
                                                                                                                                                                    1534
181
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      615
                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 15
US-10-201-292-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Corent ETLE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                 S
                                      망
                                                                                                            밁
                                                                                                                                       δ
                                                                                                                                                                   US-09-970-076-2_COPY_42_222 (1-181) x US-10-201-292-35 (1-1608)
                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                 US-10-201-292-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 35, Application US/10201292 Publication No. US20030144193A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: FastSEQ for Windows Version SEQ ID NO 35
                                                                                                                                                                                                                                                                                                                                              LENGTH: 1608
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                    No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                  196
                                                                                                            136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181 Glu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41
                   41
                                                                   21 IleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSer 40
                                                                                                                                          μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA
PheIleValPheSerThrArgGlyThrThrLeuMetLy8LeuThrGluAspArgGluGln
                                                                                                            GGATTTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAA
                                                                                                                               GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                                                                                                sapiens
                                                                                                                                                                                                                     3.51e-116
943.00
100.00%
100.00%
                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                               4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Compositions
```

and

Methods

Ś

밁

밁 S ঠ

1608 181 0

255

60

195 20 S 밁 Ś 밁 Ś 밁 Ś 밁 5 밁 δ 문 S 용

밁

	676 GAA 678	
	181 Glu 181	
675	616 AATGACGGCTTTCAGGCTCTGCAAGGCATCACTCACTCTTTTGAAGAAGTCCTGCATC	
180	161 AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle :	
615	556 GATTTCAATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTG	
160	141 AspPheAsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProVal :	
555	496 GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTTTGGTGTGAAA	
140	121 GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys :	
495	436 GCCAGCGTCATTGATTGATTGACTGATGAGAGACTCCATGAAGATCTCTTTTTCTATTCA	
120	101 AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer :	
435	376 GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA	
100	81 GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr :	
375	316 ATCCGTCAAGGCCTAGAAGAACTCCAGAAAGTTCTGCCAGGAGGAGACACTTACATGCAT	
08	61 IleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis (	
315	256 TTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAGAGACAGAGACAA :	

Search completed: December 19, 2005, 02:10:36 Job time: 586.877 secs

음 성

THIS PAGE BLANK (USPTU)

```
Regult
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Command line parameters:

-MODEL=frame+ p2n.model -DEV=xlh
-Q=/cgn2 l/USPTO_spool/US09970076/runat 14122005 ll1853_21065/app_query.fasta_1.2410
-Q=-cgn2 l/USPTO_spool/US09970076/runat l4122005 ll1853_21065/app_query.fasta_1.2410
-DB=PublIshed_Applications_NA_New -QFMT=fastap -SUFFIX=rnpbn -MINMATCH=0.1
-LOOPEXT=0 -UNITS=bits -START=1 -END==1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100
-THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=200000000 -USER=US09970076 @CGN 1 1 675 @TUNBAL 14122005 ll1853_21065
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY NEG SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                         ŏ.
                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                            943
132.5
126.5
126
109
108
                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                               Published_Applications_NA_New:*

1: /cgn2=6/ptodata/1/pubpna/US09_NEW_PUB.seq:*

2: /cgn2=6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

3: /cgn2=6/ptodata/1/pubpna/US07_NEW_PUB.seq:*

4: /cgn2=6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

5: /cgn2=6/ptodata/1/pubpna/US10_NEW_PUB.seq:*

6: /cgn2=6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

7: /cgn2=6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

8: /cgn2=6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

9: /cgn2=6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

10: /cgn2=6/ptodata/1/pubpna/US11_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ygapop 10.0 , Ygapop 10.0 , Fgapop 6.0 , Delop 6.0 , I
                                                                                                                                                 100.0
                                                                                                                                                                                       Match
                                                                                                                                                                                                          Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            December 18, 2005, 07:41:36 ; Search time 146.057 Seconds (without alignments) 607.449 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4161431 segs, 245089505 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-970-076-2_COPY_42_222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GFDLYFILDKSGSVLHHWNE......DGFQALQGIIHSILKKSCIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Copyright
                                                                                                                                                                                       Length
                                          5540
4740
11447
2834
3449
3564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xgapext
Ygapext
Fgapext
Delext
US-11-186-284-198

US-11-080-026-3

US-11-186-284-25

US-10-750-185-39040

US-10-131-826A-293

US-10-601-368-19

US-10-601-368-19

US-10-750-185-56394
                                                                                                                                                                                         ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            summaries
                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7.05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8322862
Sequence 198, App
Sequence 3, Appli
Sequence 25, Appli
Sequence 39040, A
Sequence 293, Appl
Sequence 20, Appl
Sequence 19, Appl
Sequence 56394, A
                                                                                                                                                                                       Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1
US-11-186-284-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      იი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 198, Applic Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Millennium Pharmaceuticals, APPLICANT: Berger, Allison APPLICANT: Guillemette, Tracy L. APPLICANT: Kamatkar, Shubhangi
```

```
ი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                103.5
103.5
103.5
101.5
95.5
                                   89.5
89.5
79.5
                                                                                                                                                                                                                                                                            73.5
73.5
73.5
                                                                                                                      US-10-821-234-182
US-10-801-368-2
US-11-000-463-574
US-11-000-463-102
US-10-995-561-465
US-10-995-561-435
US-10-995-561-3356
US-10-995-561-3356
US-10-995-561-3356
US-10-995-561-3356
US-10-995-561-3356
US-10-995-561-365-11
US-11-137-465-11
US-11-137-465-12
US-11-793-626-3848
US-10-793-626-3848
US-10-793-626-387
US-10-793-626-387
US-10-793-626-387
US-10-793-626-387
US-10-793-626-397
US-10-793-626-397
US-10-793-626-397
US-10-793-626-397
US-10-793-626-397
US-10-793-626-397
US-10-793-626-397
US-10-793-626-397
US-10-793-626-397
US-10-793-626-397
US-10-467-657-5893
US-10-467-657-5893
US-10-467-657-249
US-10-467-657-3083
US-10-467-657-3083
US-10-467-657-3083
US-10-467-657-3083
US-10-467-657-7299
                                                                                                  Sequence
Sequence
Sequence
                                                                                                                                                      Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                          Sequence
Sequence
Sequence
                 Sequence
Sequence
                                                   Sequence
Sequence
                                                                                                                                                                                                                       Sequence
Sequence
                                                                                                                                                                                                                                                                                          Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
 2, Appli
102, Appli
465, Appl
466, Appl
466, Appl
466, Appl
17, Appl
17, Appl
11, Appl
11, Appl
11, Appl
11, Appl
157, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Appl
2679, Ap
```

## ALIGNMENTS

Berger, Allison Guillemette, Tracy L. Kamatkar, Shubhangi

Application US/11186284 o. US20050266493A1

```
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, Stephen N.
APPLICANT: Buzgart, Lawrence J.
TITLE OF INVENTION: MOTHOUS FOR IDENTIFICATION, KITS,
TITLE OF INVENTION: METHOUS FOR IDENTIFICATION, ASS
TITLE OF INVENTION: METHOUS FOR IDENTIFICATION, ASS
TITLE OF INVENTION: METHOUS FOR IDENTIFICATION, ASS
TITLE OF INVENTION: MOMBER: US/11/186,284
CURRENT APPLICATION NUMBER: US/10/301,822
PRIOR APPLICATION NUMBER: US/0301,822
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/361,988
SEQ ID NO 198
LENGTH: 5540
TYPE: DNA
                                                                                                                                           SOFTWARE: FastSEQ
                                                                                                                                                    for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KITS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ASSESSMENT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PREVENTION, AND
```

Homo

Sapiens

```
Sequence 3, Application US/11080026
Publication No. US20050260192A1
GENERAL INFORMATION:
APPLICANT: Springer, Timothy A.
APPLICANT: Shimaoka, Motomu
APPLICANT: Shimaoka, Motomu
APPLICANT: Shimaoka, Motomu
ITTLE OF INVENTION: MODIFIED POLYPEPTIDES ST.
TITLE OF INVENTION: DESIRED CONFORMATION AND FILL REFERENCE: CFBF-P02-021
CURRENT APPLICATION UNMBER: US/11/080,026
CURRENT FILING DATE: 2005-03-15
PRIOR APPLICATION NUMBER: 09/945,265
PRIOR APPLICATION NUMBER: US 60/229,700
PRIOR FILING DATE: 2001-08-31
PRIOR FILING DATE: 2000-09-01
                                                                                                                                                                                                          RESULT 2
US-11-080-026-3
                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_42_222 (1-181)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; NAME/KEY: CDS
; LOCATION: (144)...
US-11-186-284-198
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                              687
                                                                                                                                                                                                                                                                                                                                                                                                                   627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   267
                                                                                                                                                                                                                                                     807
                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                        747
                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                     GA
A
                                                                                                                                                                                                                                                                       - G1
- G1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleargGlnGlyLeuGluCluLeuGlnLy8ValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlyPheAspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu
                                                                                                                                                                                                                                                                                                                                                           AlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                           GluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCTATTACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSer
                                                                                                                                                                                                                                                                                                         AATGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGTCCTGCATC
                                                                                                                                                                                                                                                                                                                         AsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLysSerCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                    GAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCAGCGTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCA
                                                                                                                                                                                                                                                     809
                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.15e-113
943.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      x US-11-186-284-198 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                STABILIZED IN
AND METHODS FO
                                                                                                FOR A
                                                                                                  PRODUCING
                                                                                                  SAME
                                                                                                                                                                                                                                                                                                                                                                                          160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100
                                                                                                                                                                                                                                                                                                         806
                                                                                                                                                                                                                                                                                                                                                              746
                                                                                                                                                                                                                                                                                                                                                                                                                    989
                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
```

```
Sequence 25, Application US/11186284

Publication No. US20050266493A1

GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals, In
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: MUSENTION: MOTER GENES, COMPOSITITILE OF INVENTION: MOTER GENES, COMPOSITITILE OF INVENTION: METHODS FOR IDENTIFI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: DNA
; ORGANISM: Homo
US-11-080-026-3
                                                                                                                                                                                           RESULT 3
US-11-186-284-25
                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2_COPY_42_222 (1-181)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 3
LENGTH: 4740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Match:
                                                                                                                                                                                                                                       1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 520
                                                                                                                                                                                                                                                                  160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      670 TTTACCTTCAAAGAGTTCCAGAACAACCCTAACCCAÁGÁTCACTGGTGAAGCCAATAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        580 AAGGAGTTTGTCTCAACT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       784 CTGTTTAACATCACCAACGGAGCCCGAAAGAATGCCTTTAAGATCCTAGTTGTCATCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     70 LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 AspLeuTyrPheIleLeuAspLysSerGlySerValLeu---HisHisTrpAsnGluIle
                                                                                                                                                                                                                                     ValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeuLysLys 177
                                                                                                                                                                                                                                                                                               AAATCCCGCCAAGAGCTTAATACCATCCCATCCAAGCCGCCTCGTGATCACGTGTTCCAG
                                                                                                                                                                                                                                                                                                                        LeuAlaArg------IleAlaAspSer----LysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                               IleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCTGCTT-----GGGCGGACACACACGGCCACGGGCATCCGCAAAGTGGTACGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCTTGTTCTCT------TTGATGCAGTACTCTGAAGAATTCCGGATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.15e-06
132.50
46.97%
26.26%
14.05%
                                                                                                                                                                                                                                                                                                                                                      -GGAGTCATTCGCTACGTCATTGGGGTGGGAGATGCCTTCCGCAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ×
      COMPOSITIONS, KITS, AND IDENTIFICATION, ASSESSMENT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -ArgGluGlnIleArgGlnGlyLeuGluGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-11-080-026-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        - GTGATGGAGCAATTAAAAAAGTCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4740
52
41
66
39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (1-4740)
         PREVENTION,
                                                                                                                                                                                                                                                                                                1014
                                                                                                                                                                                                                                                                                                                             159
                                                                                                                                                                                                                                                                                                                                                                                    146
                                                                                                                                                                                                                                                                                                                                                                                                                                             126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                         954
                                                                                                                                                                                                                                                                                                                                                                                                                 903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          843
```

```
밁
                                                      ঠ
                                                                                              밁
                                                                                                                                 ફ
                                                                                                                                                                         밁
                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-2_COPY_42_222 (1-181) x US-11-186-284-25 (1-11447)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT FILING DATE: 2005-07-21
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR PILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR PILING DATE: 2001-12-10
PRIOR PILING DATE: 2001-12-10
PRIOR PILING DATE: 2002-03-05
PRIOR PILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR FILING DATE: 2002-05-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 25
LENGTH: 11447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: CDS
LOCATION: (1)...(9192)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE: MPM01-029P2RNM
                                                                                                                                                                           1708
                                                                                                                                                                                                                                                        1657
                                                                                                                                                                                                                                                                                                                                                                                                             1543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OF INVENTION:
                                                                                                                                                                                                                                                                                                                                  1603
                                                                                                                                                                                                                 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                    75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  w
                    TCTTTTGAACTCACACAGTCTATCTGCCTT 1854
                                                                                                                                                                           GAAATCTTTGCAGTTGGTGAAGGATGCCGTTCGCTCAGAATTGGAAGCTATTGCCTCT 176
                                                                                                                                                                                                     IleValTyrCysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAsp
                                                                                                                                                                                                                                                                                                                                  AAG---GGATCAAGAAGCAATGTGCCAAAGGTCATGATTCTTATCACGGATGGGAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspargGluGlnIleArgGlnGlyLeuGluCluLeuGlnLysValLeuPro-----Gly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATATTGTGTTTTGGTTGATGGCTCCTATAGCATTGGGATTGCAAACTTTGTTAAAGTT 1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                      TCATCAGATGCTTTC-----AGAGATCCTGCGATAAAACTGAGGAATTCAGATGTT
                                                                                                                                                                                                                                                                                        HisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAla
                                                                                                                                                                                                                                                                                                                                                                     ArgGlnGlyTyrArgThr-----AlaSerValIleIleAlaLeuThrAspGlyGluLeu 112
                                                                                                                                                                                                                                                                                                                                                                                                             GGATCTACAAATACTGGCAAAGCAATGACTTATGTCAGAGAGAAAATATTTGTGCCTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                             GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTGAAGATATAATT------GAAGCAATAAACACCTTCCCTTACAGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerPheIleValPheSerThr-----ArgGlyThrThrLeuMetLysLeuThrGlu 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAGCCTTTTTGGAAGTTCTTGTAAAAAGTTTTGAAATTTCACCAAATAGGGTCCAGATT
                                                      IleHisSerIleLeuLysLysSerCysIle 180
                                                                                                                           -----SerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTCTTGTGCAATACAGCCGGGATCCTCATACTGAGTTCACTTTGAAAAAAATTCACCAAA 1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7.18e-05
126.50
48.95%
28.95%
13.41%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  THERAPY OF COLON CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels:
Gaps:
                                                                                                -TTTGATGCTTTTCAGAGGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               55
38
74
23
                                                                                                1824
                                                                                                                                                                                                                                                        1707
                                                                                                                                                                                                                                                                                                                                1656
                                                                                                                                                                                                                                                                                                                                                                                                             1602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
FILE REFERENCE: MATILIOO-2
CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT FILING DATE: 2003-12-31
FRIOR APPLICATION NUMBER: US 60/437,482
FRIOR FILING DATE: 2002-12-31
NUMBER: OF SEQ ID NOS: 64922
SOFTWARE: PatentIN version 3.1
SEQ ID NO 39040
LENGTH: 2834
TYPE: DNA
ORGANISM: Bovine 19866880867914
US-10-750-185-39040
                                      밁
                                                                      á
                                                                                                                   밁
                                                                                                                                                 S
                                                                                                                                                                                           문
                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_42_222 (1-181) x US-10-750-185-39040 (1-2834)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-750-185-39040/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 39040, Application US/10750185
Publication No. US20050260603A1
GENERAL INFORMATION:
APPLICANT: MMI GENOMICS, INC.
APPLICANT: DENISE, Sue K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ŏ
::
                                                                                                                                                                                                                                                                          1833
                                                                                                                                                                                                                                                                                                                                                       1890
                                                                                                                                                                                                                                  · 114 uAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleVa
                                                                                                                                                                                                                                                                                                                                                                                                                               1944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2061 GCGATGAAGGTGTTCATGAATGAGGTGATAAAGATGTTCCACGTTGGACCGGAC---AGA
                                                                                                                                                       134
174 eLeuLysLysSerCys 179
                                                                                                                                                                                                                                                                                                              94
                                                                                                                                                                                                                                                                                                                                                                                       74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 ---IleTyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerProGlnLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        w
                                      -GACAGAATGTTTTTCGTGCATGAT---TTTGAGTCCTTGAAGACCATCCAACAAGAAGT 1617
                                                                                                                                             CCCGGTG------GCTGATGCTGCAGAGGCGCTGAGGGGCCATGGAGTCACCAT
                                                                                                                                                                                                                                                                        TGCTCGCAGCAA-CGTGCCTT-GGTATCTCATTTGTTCACTGACGGCCAATCTATGGA
                                                                                                                                                                                                                                                                                                        nArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGl 114
                                                                                                                                                                                                                                                                                                                                                                                                                               CACTCCAGTGTGGCAGGGCTTGGAGGTAGCCGTTGACAGCATCCAGCAG-----AAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MetSerPheIleVal-PheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspAr 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACATTTACTTCCTTATTGACGGGTCTGGCAGTACC-----CACCAAGACGACTTTCTC 2062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DeNISE, Sue K.
KERR, Richard
ROSENFELD, David
HOLM, Tom
BATES, Stephen
                                                                        sAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIl
                                                                                                                   TTATGCAGTTGGAGTCAGAGATGCTAATATTGCTGAGCTTCAAGAGATTGCTGAA-----
                                                                                                                                                                                                                                                                                                                                                     AGGGGGCACCAAGATGGGTGAGGCCCTG---GGCAGCATGATCCAGGTCTTTGCAGACTC
                                                                                                                                                                                                                                                                                                                                                                                       yGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gGluGlnIleArgGlnGlyLeuGlu------GluLeuGlnLysValLeuProGl 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.66e-05
122.00
50.00%
29.03%
12.94%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
```

174 1673 1776

1834

94 1891 38

```
밁
ş
                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 5
US-10-131-826A-293
                                           8
                                                                                                                             US-09-970-076-2_COPY_42_222 (1-181) x US-10-131-826A-293 (1-3449)
                                                                                                                                                                                                                                                                                                                                                   ; TYPE: DNA
; ORGANISM: Homo
US-10-131-826A-293
                                                                                                                                                                                               Query Match:
                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR PELING DATE: 1997-08-26
PRIOR FILING DATE: 1997-08-26
PRIOR PILING DATE: 1997-09-27
PRIOR PILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059113
PRIOR PILING DATE: 1997-09-17
PRIOR FILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/05917
PRIOR APPLICATION NUMBER: 60/05917
PRIOR APPLICATION NUMBER: 60/059184
PRIOR PILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059184
PRIOR APPLICATION NUMBER: 60/059263
PRIOR APPLICATION NUMBER: 60/059263
                                                                                                                                                                                                                                                                                                                                                                                                                 Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 550
SEQ ID NO 293
LENGTH: 3449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 293, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: P3330R1C128
CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Baker, Kevin APPLICANT: Beresini, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/059588 PRIOR FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/059263
FILING DATE: 1997-09-18
APPLICATION NUMBER: 60/059352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1616 GGTACAAGACATCTGT
                                             372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              293, Application US/10131826A ion No. US20050245730A1
  22 TyrTyrPhe---ValGluGlnLeuAlaHisLysPheIleSerProGlnLeu---ArgMet 39
                                                                                      ω
                                                                                    AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle 21
                                             GACCTGGTTTTCATCATTGACAGCTCTCGCAGTGTCAACACCCATGACTATGCAAAGGTC 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gao, Wei-Qiang
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Watanabe, Colin K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stewart, Timothy A Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                            Sapien
                                                                                                                                                                             0.00259
109.00
46.35%
23.96%
11.56%
                                                                                                                                                                                               Mismatches:
Indels:
                                                                                                                                                                                                                                             Conservative:
                                                                                                                                                                        3449
46
43
77
26
```

```
LENGTH: 3564
; TYPE: DNA
; ORGANISM: MUS II
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)
US-10-601-368-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멹
                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                     Ś
                                                        US-09-970-076-2_COPY_42_222 (1-181) x US-10-601-368-20 (1-3564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-601-368-20
                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR PILING DATE: 2000-04-27
PRIOR PILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US/09/322,790
PRIOR APPLICATION NUMBER: US/09/322,790
PRIOR PILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          543 TTCAAGAGGAAGTCCGAGGTGGAGCGTGCTGTCAAGAGGATGCGGCATCTGTCCACGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       879 GAGACGCTGACCTCCGTGTTCCAGAAGAAGTTGTGC 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              168 GlnGlyIleIleHisSerIleLeuLysLysSerCys 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              148 AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       762 ACGGGCATCCTAATCTTTGCCATTGGTGTGGGCCCAGGTAGACTTCAACACCTTGAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              130 LeuGlyAlaIleValTyrCysValGlyVal-----LysAspPheAsnGluThrGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       714 GGGAGACCTCAGGACTCCGTG------GCCGAGGTGGCTGAGGCACGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              110 GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         654 GCAGAGGGGCCCCGGCCCCTGAGGGAGAATGTGCCCACGGGTCATAATGATCGTGACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            603 ACCATGACTGGGCTGGCCATCCAGTAT------GCCCTGAACATCGCATTCTCAGAA 653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              492 GGCCTGCTCCAATAT-----ĠĠĊAGCÁĊTGTCAAGAATGAGTTCTCCCTCÁÁĠACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   55 ThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95 ArgGlnGlyTyrArg------ThrAlaSerValileIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                75 GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40 SerPheIleValPheSerThrArgGlyThrThrLeu-------MetLysLeu
AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTGGGAGTGAGCCCCATGAGGÀCCATGTCTTCCTTGTGGCCAAT---TTCAGCCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lora, Jose M.
                                                                                                                                                                                                                                                                                                                                                            musculus
                                                                                                                      0.00369
108.00
38.38%
24.24%
                                                                                                                             Conservative: Mismatches: Indels:
                                                                                                                                                                                          Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     74
```

밁

490

GACATCGTCATTGTCTTAGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTCCAA

```
; TYPE: DNA
; ORGANIM: Mus musculus
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (28)...(3591)
US-10-601-368-19
                                                                                                                                                                                                                                                                                                        APPLICANT: LOTA, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOPTWARE: FASESEQ for Windows Version 3.0
SEQ ID NO 19
LENGTH: 4858
                                        Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 7
US-10-601-368-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                     Alignment Scores: Pred. No.:
US-09-970-076-2_COPY_42_222 (1-181) x US-10-601-368-19 (1-4858)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Pan, Yang APPLICANT: Lora, Jos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1015 -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CysValGlyValLysAsp------PheAspGluThrGlnLeuAlaArgIleAla 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCAAG-----AAAGTGATGATTGTCATCACGGACGGGGAATCCCACGACAGCCCAGAC 837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTAAAAGATGTGGTGGAAGCCGCCAGCCACATTGAGCAGAGAGGAGGGACAGAGACCCGC 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACTTCCTCATCAATATCCTCAAAAAGTTCTACATTGGCCCCGGCCAGATCCAGGTCGGA 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGAGAAGGTGATCCGGCAGAGCGAGAAGGACAACGTGACCAGATACGCTGTGGCCGTT 897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluGlyPheGlu------ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAGTCCAGTATGGAGAAGATGCCGTCCATGAGTTCCACCTT---AATGACTACAGGTCT 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCGCCAGCGACCCTGACGACAAGCACTTCTTCAACGTCACAGATGAGGCGGCCCTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp----- 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACGGCATTTGGCATTGAATTTGCACGCTCGGAGGCTTTCCAGAAGGGTGGAAGAAAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGGGCTACTACAACCGCAGGGGGATCAATCCAGAGACTTTTCTAAATGAAATCAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         - AAGGACATTGTTGATGCCCTTGGGGACAGGATCTTCAGCTTGGAAGGC 1062
                                                                                                                                                                                                               (3591)
                                      0.00581
108.00
38.38%
24.24%
11.45%
                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AND USES THEREOF
                                        4858
28
38
38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-750-185-56394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                            Score:
                                                                            Alignment Scores: Pred. No.:
                                                                                                                                     ORGANISM: Bovine US-10-750-185-56394
                                                                                                                                                                       NUMBER OF SEQ ID NOS: 64922
SOFTWARE: PatentIN version 3.1
SEQ ID NO 56394
LENGTH: 1325
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 56394, Application US/10750185 Publication No. US20050260603A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                APPLICANT: ROSENFELD, David
APPLICANT: HOLM, Tom
APPLICANT: BATES, Stephen
APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING
FILE REFERENCE: MMI1100-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: MMI GENOMICS, APPLICANT: DENISE, Sue 1
                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 60/437,482 PRIOR FILING DATE: 2002-12-31
                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT FILING DATE: 2003-12-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    865 CTGGAGAAGGTGATCCGGCAGAGCGAGAAGGACAACGTGACCAGATACGCTGTGGCCGTT 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      634 ATAGTCCAGTATGGAGAAGATGCCGTCCATGAGTTCCACCTT---AATGACTACAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          751 ACGGCATTTGGCATTGAATTTGCACGCTCGGAGGCTTTCCAGAAGGGTGGAAGAAAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CysValGlyValLysAsp------PheAsnGluThrGlnLeuAlaArgIleAla 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCAAG-----AAAGTGATGATTGTCATCACGGACGGGAATCCCACGACAGCCCCAGAC 864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACTTCCTCATCAATATCCTCAAAAAGTTCTACATTGGCCCCGGCCAGATCCAGGTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACATOGTCATTGTCTTAGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTCCAA 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCGCCAGCGACCCTGACGACAAGCACTTCTTCAACGTCACAGATGAGGCGGCCCTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGGGCTACTACAACCGCAGGGGGATCAATCCAGAGACTTTTCTAAATGAAATCAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DeNISE, Sue K.
KERR, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -AAGGACATTGTTGATGCCCTTGGGGACAGGATCTTCAGCTTGGAAGGC
                                                                                                                                                       19866880505724
  0.00117
107.00
46.35%
23.44%
11.35%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INC.
  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                        BOVINE TRAITS
  1325
45
44
77
26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1089
```

115

115 810 97 80 690

```
CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR FILING DATE: 2003-04-07
NUMBER OF SEQ ID NOS: 1704
SOFTWARE: pt_SEQ_genes Version 1.0
SEQ ID NO 182
LENGTH: 2501
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 9
US-10-821-234-182/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2_COPY_42_222 (1-181) x US-10-750-185-56394 (1-1325)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB:
                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
  Query Match:
                                                               score:
                                                                                   Pred. No.:
                                                                                                    Alignment Scores:
                                                                                                                                              US-10-821-234-182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 182, Application US/10821234 Publication No. US20050255114A1
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Andarmani, Susan
APPLICANT: Tang, Y. Tom
TITLE OF INVENTION: Methods for Diagnosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Labat, Ivan
APPLICANT: Stache-Crain, Birgit
APPLICANT: Andarmani, Susan
                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 821A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          130 LeuGlyAlaIleValTyrCysValGlyVal-----LysAspPheAspGluThrGlnLeu 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      765 GCAGAGGGGGCCCGGCCCCTGAGGGAGAATGTGCCTCGGGTCATAATGATCGTGACTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCAAGAGGAAGTCCGAGGTGGAGCGTGCCGTCAAGAGGATGCGGGATCTGTCCACGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGGAGTTCATTGTGGACATCCTGCAGTTCTTGGACATTGGCCCTGACGTCACCCCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGACGCTGACCTCAGTGTTCCAGAAGAAGTTGTGC 1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnGlyIleIleHisSerIleLeuLysLysSerCys 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAGGCCCAGGACTCGGTG------GCCGAGGTGGCCGCAAAAGCCCGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCATGACGGGGCTGGCCATCCAGTAC------GCCCTGAACATCGCCTTCTCGGAA 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTCTGCTCCAGTAT-----GGCAGCACGGTCAAGAACGAGTTCTCCCTCAAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrTyrPhe---ValGluGlnLeuAlaHisLysPheIleSerProGlnLeu---ArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACGTGGTCTTTATCATTGACAGCTCACGCAGCGTCAACACCCCACGACTACGCAAAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTGGGAGCGAGCCCACGAGGÁCCACGTCTTCCTGGTGGCCAAC---TTCAGCCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAGGCATCCTGATCTTTGCCATCGGTGTGGGCCCAGGTGGACTTCAACACGCTGAAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgGlnGlyTyrArg------ThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrGluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGly
43.40%
22.64%
11.19%
                                                           0.00471
                                      Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps:
                       Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                             Treatment of Preeclampsia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-2_COPY_42_222 (1-181) x US-10-821-234-182 (1-2501)
    US-10-601-368-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-601-368-2
                                                                                                                                                                                                        APPLICANT: LOTA, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUFFILE REFERENCE: 07334-275001
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
                                                                                                      SEQ ID NO 2
LENGTH: 3564
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/10601368 Publication No. US20050260702A1
                       FEATURE:
NAME/KEY: CDS
LOCATION: (1).
                                                                                                                                                                 SOFTWARE: FastSEQ for Windows
                                                                                                                                                                                         NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                     ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1550 AACATCTACCTGGTGCTAGATGGATCAGACAGCATTGGGGCCAGCAACTTCACAGGAGCC 1491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1214 CATGTCATCCTCATGACTGATGGATTGCACAACATGGGCGGGGACCCAATTACTGTC 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1490 AAAAAGTGTCTAGTCAACTTAATTGÁGAAGGTGGCAAGTTATGGTGTGAAGCCA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1034 TTGGCTTCCAAGAAAGACAATGAGCAACATGTGTTCAAAGTCAAGGAT---ATGGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1094 TATCTGGATGTCTATGTGTTTGGGGTCGGGCCTTTGGTGAACCAAGTGAACATCAATGCT 1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1154 ATTGATGAGATCCGGGACTTGCTATACATTGGCAAGGATCGCAAAAACCCCAAGGGAGGAT 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1274 GTGTÁCAGCATGATGAGCTGGCCAGATGACGTCCCTCCTGAAGGCTGGAACCGCÁCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1316 AAGTTGAAGTCAGGGACTAACACC--------AAGAAGGCCCTCCAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1376 GACAGCAGTAATGCAGACTGGGTCACGAAGCAGCTCAATGAAATCAATTATGAAGACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1436 ÁGÁTATGGTCTAGTGACATATGCCÁCÁTACCCCAAAATTTGGGTCÁÁÁGTGTCTGÁÁGCA 1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 102 SerValIleIleAlaLeuThrAspGly------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  167 LeuGlnGlyIleIleHisSerIleLeuLysLysSer 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90 IleTyrTyrGluAsnArg------GlnGlyTyr---ArgThrAla 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              70 LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               38 ArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18 TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 AspLeuTyrPheIleLeuAspLysSerGlySerVal------LeuHisHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----GluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGAAGATGTTTTCTACCAAATGATCGATGAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspLeuGlyAlaIleValTyrCysValGly------ValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----AspArgGluGlnIleArgGlnGlyLeuGluGluLeu------Gln
                         (1)...(3564)
                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                σ
                                                                                                                                                                                                                                                                                                                                                         INTEGRIN ALPHA SUBUNIT
                                                                                                                                                                      Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              942
                                                                                                                                                                                                                                                                                                                                                             AND
                                                                                                                                                                                                                                                                                                                                                             USES THEREOF
```

978

1215

110

1275

89

69

1437

37

```
Ş
APPLICANT: Tang, Y Tom
APPLICANT: Thiu, Chenghua
APPLICANT: Liu, Chenghua
APPLICANT: Chen, Rui-hong
APPLICANT: Chen, Rui-hong
APPLICANT: Wen, Xiaohong B.
APPLICANT: Wen, Xiaohong B.
APPLICANT: Zhang, Jie
APPLICANT: Zhang, Jie
APPLICANT: Cao, Yi-Cheng
APPLICANT: Cao, Yi-Cheng
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: NOVel Nucleic Acids and Policant APPLICATION NUMBER: US/11/000,463
CURRENT APPLICATION NUMBER: 10/291,265
PRIOR APPLICANG DATE: 2002-11-08
                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2_COPY_42_222 (1-181) x US-10-601-368-2 (1-3564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                        US-11-000-463-574
                                                                                                                                                                                                                                                                                                                                                  Sequence 574, Application US/11000463 Publication No. US20050266423A1
                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                               1015 ----AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGCCTGGAAGGC 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23 TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGATATGCGGTGGCCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCCCACGACAGCCCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGGCAGATCCAGGTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTTCAG 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGATGAGGCTGCCTTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CysValGlyValLysAsp------PheAsnGluThrGlnLeuAlaArgIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGCTACTÁCAACCGCÁGGGGGATCÁÁTCCAGAAACTTTTCTÁAATGAAÁTCAAATÁC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TyrargThralaSerValIleIleAlaLeuThraspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTAAAAGATGTGGTGGAAGCTGCCAGCCACATTGAGCAGAGAGGAGGAACAGAGACCCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---AACGACTACAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.0125
104.00
38.38%
24.24%
11.03%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                 Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
```

```
RESULT 12
US-11-000-463-102
; Sequence 102, A
                                                                                                                                                         밁
                                                                                                                                                                                      S
                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_42_222 (1-181) x US-11-000-463-574 (1-3967)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo US-11-000-463-574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 574
LENCTH: 3967
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 09/633,870 PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OR APPLICATION NUMBER: PCT/US01/02623
OR FILING DATE: 2001-01-25
OR APPLICATION NUMBER: 09/922,279
OR FILING DATE: 2001-08-03
OR APPLICATION NUMBER: 09/491,404
OR FILING DATE: 2000-01-25
OR FILING DATE: 2000-07-17
OR APPLICATION NUMBER: 09/617,746
OR FILING DATE: 2000-07-17
OR APPLICATION NUMBER: 09/631,451
OR FILING DATE: 2000-08-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   539
                                                                                                                                                                                                                                                                  116 LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                                          887 CTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGATATGCGGTGGCCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                656 GTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---AACGACTACAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         596 CACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGGCAGATCCAGGTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           713 GTAAAAGATGTGGTGGAAGCTGCCAGCCACATTGAGCAGAGAGGAGGAGGAACAGAGACCCGG 772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41 PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23 TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr 22
                                                                                                                 AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly
                                                                                                                                                       ATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGATGAGGCTGCCTTG---
                                                                                                                                                                                        CysValGlyValLysAsp----
                                                                                                                                                                                                                                                                                                                                                                                  GCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCCCACGACAGCCCAGAC 886
                                                                                                                                                                                                                                                                                                                                                                                                                TyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTTCAG
                                                                                                                                                                                                                               CTGGGCTACTACAACCGCAGGGGGATCAATCCAGAAACTTTTCTAAATGAAATCAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                            AAGGACATTGTCGATGCCCTGGGGGGACAGAATCTTCAGCCTGGAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.0147
104.00
38.38%
24.24%
11.03%
                                                                                                                                                                                          -----PheAsnGluThrGlnLeuAlaArgIleAla 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3967
28
28
38
9
                                                                              1111
                                                                                                                                                                                                                                 1006
                                                                                                                                                                                                                                                                    135
                                                                                                                                                                                                                                                                                                          946
                                                                                                                                                                                                                                                                                                                                                                                                                                                           832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         655
                                                                                                                                                                                                                                                                                                                                                                                                                        115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80
```

Application US/11000463

```
S
                                      밁
                                                                         δ
                                                                                                                   밁
                                                                                                                                                      Ś
                                                                                                                                                                                              밁
                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Zhou, Ping
APPLICANT: Cao, Y1-Cheng
APPLICANT: Cao, Y1-Cheng
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: NOVel Nucleic Acids and Polici Reference: 785CIP4CN
FILE REFERENCE: 785CIP4CN
CURRENT APPLICATION NUMBER: US/11/000,463
CURRENT FILING DATE: 2004-11-29
PRIOR APPLICATION NUMBER: 10/291,265
PRIOR FILING DATE: 2002-11-08
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR FILING DATE: 2001-08-03
PRIOR FILING DATE: 2001-08-03
PRIOR FILING DATE: 2001-08-03
                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-970-076-2_COPY_42_222 (1-181) x US-11-000-463-102 (1-3969)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-11-000-463-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 102
LENGTH: 3969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Tang, Y Tom
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Publication No. US20050266423A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo :
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: CDS
LOCATION: (52)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 09/491,404
FILING DATE: 2000-01-25
APPLICATION NUMBER: 09/617,746
FILING DATE: 2000-07-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 09/631,451
                                                                                                                                                                                                 658
                                                                                                                                                                                                                                                                              865
                                                                                                                                                                                                                                                                                                                                                       541 GACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTTCAG 597
                                        775
                                                                                                                                                          61
                                                                                                                                                                                                                                       41
                                                                                                                                                                                                                                                                                                                  23
                                                                                                                                                                                                                                                                                                        TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer 40
                                                                                                                                                          IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis 80
                                                                                                                                                                                                 GTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---AACGACTACAGGTCT 71
                                                                                                                                                                                                                                   PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln 60
                                                                                                                                                                                                                                                                            CACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGGCAGATCCAGGTTGGA
  TyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                        GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly 97
                                                                                                                                                                                                                                                                                                                                                                                           AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                   Qian, Xiaoho
Wang, Zhiwei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wehrman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .. (3618)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rui-hong
Xiaohong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.0147
104.00
38.38%
24.24%
11.03%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₩.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3969
28
28
28
9
                                                                                                                                                                                                                                                                              657
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2_COPY_42_222 (1-181) x US-10-601-368-1 (1-5042)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-601-368-1
                                             문
                                                                                     Ş
                                                                                                                                    멼
                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-601-368-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: LOTA, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 5042
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE: NAME/KEY: CDS
LOCATION: (127)...(3690)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1009 ATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGATGAGGCTGCCTTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             136 CysValGlyValLysAsp-------pheAspGluThrGlnLeuAlaArgIleAla 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       116 LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                 673 CACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGGCAGATCCAGGTTGGA
                                                                                                                                                                                                                                                                                                                           616 GACATCGTCATTGTCCTGGÁTGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      152 AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     889 CTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGATATGCGGTGGCCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               835 GCCAAG----
                                             790 GTAAAAGATGTGGTGGAAGCTGCCAGCCACATTGAGCAGAGAGGAGGAACAGAGACCCCGG 849
                                                                                       61 IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis 80
                                                                                                                                                                                 41 PhelleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln 60
                                                                                                                                                                                                                                                                            23 TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer 40
81 GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly 97
                                                                                                                                                                                                                                                                                                                                                       3 AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                    GTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---AACGACTACAGGTCT 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGGCTACTACAACCGCAGGGGGATCAATCCAGAAACTTTTCTAAATGAAATCAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGGACATTGTCGATGCCCTGGGGGÁCAGAATCTTCAGCCTGGAAGGC 1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              104.00
38.38%
24.24%
11.03%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -- AAGGTGATGATTGTCATCACAGATGGGGAGTCCCACGACAGCCCAGAC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1008
                                                                                                                                                                                                                                                                                                                             672
                                                                                                                                                                                                                                                                                                                                                                        22
```

710

818 175 650 129 590

```
Sequence 464, Application US/1099561

Publication No. US20050272054A1

GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPON
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CL001559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
NUMBER OF SEQ ID NOS: 85702
SOPTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 464
LENGTH: 3175
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
S
                                   밁
                                                                     ફ
                                                                                                               밁
                                                                                                                                           र्
                                                                                                                                                                                     밁
                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                  ई
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_42_222 (1-181)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 14
US-10-995-561-464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-995-561-464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          964
                                     483
                                                                                                                                                                                         363
                                                                                                                                                                                                                                                                    303
                                                                                                                                                                                                                                                                                                                                            243 GTGTACTTCGTGCTGGACACCTCGGAGAGAGCGTCACCATGCAGGCACCCCACGGACATCCTG
                                                                                                                 423
                                                                                                                                                     50
 90
                                                                         70
                                                                                                                                                                                                                                                                                                        15
                                                                                                                                                                                                                                                                                                                                                                                  4 LeuTyrPheIleLeuAspLysSerGlySerVal------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGGCTACTACAACCGCAGGGGATCAATCCAGAAACTTTTCTAAATGAAATCAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCCCACGACAGCCCAGAC 963
                                                                                                                                                                                         CTGGACCAGGTGGCGCTGGACTGGCGCCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG
                                                                                                                                                                                                                             SerProGlnLeuArgMetSerPhe------IleValPheSerThrArgGlyThr 49
                                                                                                                                                                                                                                                                    LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CysValGlyValLysAsp------PheAsnGluThrGlnLeuAlaArgIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGATATGCGGTGGCCGTC 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAsp 109
                                     TCCTTCCGCCGCGGC----ACCTTCACCGACTGCGCGCTGGCCAACATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGATGAGGCTGCCTTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                 GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                                                                                                                                   ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGln 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         - AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGCCTGGAAGGC 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.0123
103.50
40.00%
22.79%
                                                                                                                                                                                                                                                                                                                                                                                                                        x US-10-995-561-464 (1-3175)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                3175
49
37
84
45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESPONSE, METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1083
                                     536
                                                                                                                                                                                         422
                                                                           89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                909
                                                                                           문
                                                                                                                               S
                                                                                                                                                                     片
                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_42_222 (1-181) x US-10-995-561-465 (1-3464)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-995-561-465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-995-561-465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 465, Applica Publication No. US200 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 465
LENGTH: 3464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: CARGILL, Michele et al.

TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RES
TITLE OF INVENTION: DETECTION AND USES THEREOF
FILE REFERENCE: CL001559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
NUMBER OF SEQ ID NOS: 85702
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           No.:
                                                                                                                                                                                                                                                  303
                                                                                                                                                                                                                                                                                                                          819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        591 GGCCACGTCACCGGCAGCCCCTGCGGGGGCCATCAAGCTGCAGGCCGAGCGGGCCCGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              537
                   483 TCCTTCCGCCGCGC----
                                                                                                                                                                     363 CTGGACCÁGGTGGCGCTGÁGCTGGCGCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG
                                                                                                                                 50
                                                     70 LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln 89
                                                                                                                                                                                                                                                                                  15 LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle
                                                                                                                                                                                                                                                                                                                                                    SerProGlnLeuArgMetSerPhe-----IleValPheSerThrArgGlyThr
                                                                                                                                                                                                                                            TCTTCCACATGAAGCAGTTCGTGCCGCAGTTCATCAGCCAGGTGCAGAACGAGTTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGGGCATCCGGCCTCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCCGGCAGGACCGCAGCAAGGGC----ACCGTCCACTTCGCCGTGGTCATCACCGAC
                                                                                                                               ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAACACGAAGCCTACGGAGAGTGCTACAAGGTGAGCTGCCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATCAAGGTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACATCGCCAGCACGCCGCACGAGCTCTACCGC-----AACGACTACGCCACC
                                                                                           GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/10995561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US20050272054A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                            0.014
103.50
40.00%
22.79%
10.98%
                   - ACCTTCACCGACTGCGCGCTGGCCAACATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysLysSerCysIleGlu 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESPONSE,
```

METHODS

Q

482 69 42 49

536

ω u

```
Search completed: December 19, 2005, 02:30:57 Job time : 162.057 secs
                                                                                         759 ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCACCGCATCATCAAGGTCATG 818
                                                                                                                                                                                                                             159 ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu----- 175
                                                                                                                                                                                                                                                                             711 GACATCGCCAGCACGCGCACGAGCTCTACCGC-----AACGACTACGCCACC 758
                                                                                                                                                                                                                                                                                                                         141 AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe 158
                                                                                                                                                                                                                                                                                                                                                                      651 GAGGGCATCCGGCTCTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGCCTGCGG 710
                                                                                                                                                                                                                                                                                                                                                                                                                  591 GGCCACGTCACCGGCAGCCCCTGCGGGGGCATCAAGCTGCAGGCCGAGCGGGCCCGCGAG 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    110 GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp 129
```

유왕

밁 δ 유 성

8 8 8 8

밁

```
Minimum I
Maximum I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OM protein - protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                         22222222111111111
26543210987654321098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. is th score greater than and is derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              88
                    138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
138.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Issued Patents AA:*

1: /cgn2 6/ptodata/1

2: /cgn2 6/ptodata/1

3: /cgn2 6/ptodata/1

4: /cgn2 6/ptodata/1

5: /cgn2 6/ptodata/1

6: /cgn2 6/ptodata/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             is the number of results predicted by chance to have a ater than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              December 14, 2005, 11:02:37; Search time 15.6012 Seconds (without alignments)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                572060 seqs, 82675679 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2_COPY_44_216
                      DLYFILDKSGSVLHHWNEIY.....HVFPVNDGFQALQGIIHSIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /cgn2_6/ptodata/1/1aa/5_COMB.pep:*
/cgn2_6/ptodata/1/1aa/6_COMB.pep:*
/cgn2_6/ptodata/1/1aa/RE_COMB.pep:*
/cgn2_6/ptodata/1/1aa/RE_COMB.pep:*
/cgn2_6/ptodata/1/1aa/RE_COMB.pep:*
/cgn2_6/ptodata/1/1aa/RE_COMB.pep:*
                    GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapext 0.5
               US-08-605-672-37

US-08-482-293A-37

US-09-193-043-37

US-09-193-073-37

US-09-350-259-35

US-08-362-652-55

US-08-362-652-55

US-08-482-293A-55

US-08-9133-043-55

US-09-193-043-55

US-09-193-043-55

US-08-286-889-46

US-08-943-363-46

US-08-943-363-46

US-08-943-363-46

US-08-943-363-46

US-08-943-363-46

US-09-193-043-46

US-09-193-043-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-104-047-2639
US-08-286-889-37
US-08-485-618-37
US-08-362-652-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     916.781 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ltd
                                     Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
               37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
35, Appl
35, Appl
35, Appl
35, Appl
36, Appl
36, Appl
36, Appl
36, Appl
36, Appl
36, Appl
36, Appl
36, Appl
36, Appl
37, Appl
38, Appl
39, Appl
39, Appl
39, Appl
30, Appl
30, Appl
30, Appl
30, Appl
30, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31, Appl
31,
                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                   RESULT 2
US-08-286-889-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
US-10-104-047-2639
                                   Sequence 37, Application US/08286889
Patent No. 5470953
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Mich
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5470953el Human 2 Integrin Alpha
TITLE OF INVENTION: No. 5470953el Human 2 Integrin Alpha
NUMBER OF SEQUENCES: 51
CORRESPONDENCE ADDRESS:
ADDRESSE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best
STREET: 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                      162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    104
```

	45	44	43	42	41	40	39	38	37	36	<b>3</b> 5	34	ω u	32	31	30	29	28
	128.5	128.5	128.5	128.5	128.5	128.5	128.5	128.5	128.5	128.5	134.5	134.5	134.5	134.5	134.5	134.5	134.5	134.5
	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	1153	1153	1153	1152	1152	1152	435	216	187	187	1161	1161	1161	1161	1161	1161	1161	1161
	μ	_	1	σ	4.	۲	4	Ŋ	ب	۳	N	N	N	_	μ.	_	_	1
NI TONNENIES	US-08-485-618-3	US-08-286-889-3	US-08-173-497-3	5424399-2	PCT-US96-01314-43	US-08-476-062A-43	PCT-US95-04439-1	US-09-795-872-5	US-08-687-706-61	US-08-177-109A-61	US-09-350-259-53	US-09-688-307A-53	US-09-193-043-53	US-08-943-363-53	US-08-482-293A-53	US-08-605-672-53	US-08-362-652-53	US-08-485-618-53
	Sequence 3, Appli	Sequence 3, Appli	Sequence 3, Appli	Patent No. 5424399	Sequence 43, Appl	43,	Sequence 1, Appli	Sequence 5, Appli	Sequence 61, Appl	Sequence 61, Appl	•	•	•	Sequence 53, Appl	Sequence 53, Appl	•	Sequence 53, Appl	Sequence 53, Appl

ALIGNMENTS

```
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 2639
; LENGTH: 488
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-104-047-2639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2639, Application US/10104047
PATENT NO. 6943241
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. 6943241e1 full length
FILE REFERENCE: H1-A0105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILLING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE:
                         121 EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSIL 173
                                                                                                                           44 DLYFVLDKSGSVANNWIEIYNFVQQLAERFVSPEMRLSFIVFSSQATIILPLTGDRGKIS 103
                                                                                                                                                                                                                          Similarity 59.5
03; Conservative
EAKISRSLGASVYCVGVLDFEQAQLERIADSKEQVFPVKGGFQALKGIINSIL
                                                                                                    KGLEDLKRVSPVGETYTHEGLKLANEQI--QKAGGLKTSSIIIALTDGKLDGLVPSYAEK
                                                                                                                                                                                                                                                                                                57.7%; Score 519; DB 2; Length 488; 59.5%; Pred. No. 9.9e-52; tive 34; Mismatches 34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDNA
```

<u>ب</u>

Gaps

60

Alpha Subunit

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                      US-08-485-618-37
                                                                                                                                                                                                                                                                                                                                                      RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-286-889-37
                                                                                                                                                                                                        Sequence 37, Application US/08485618
Patent No. 5728533
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5728533el Human 2 Integrin Alpha
NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: P38,659
REFERENCE/DOCKET NUMBER: 27866/32168
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DALL. 435
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
APPLICATION NUMBER: 23-DEC-1993
TOTAL DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Batentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/286,889
            COUNTRY: United States
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Marehall, O'Toole, Gerstein, Murray & Borun STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                    CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: 312-474-63
TELEFAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                            165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          114 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  202
                                                                                                                                                                                                                                                                                                                                                                                                           313 LRSI 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 55 DREQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          H: 1151 amino acida amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                          LQGI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DPQSLVDPIVQLQ---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15.4%; Score 138.5; DB 1; 28.3%; Pred. No. 7.5e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -ĠĿŤŶŦAŦĠĨŖŦVMĖEĿFHSKNGSŖKSAKKĨĿĿVĨŦDGQKYRD
 Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25;
                                                                                                                                                                                                                                   Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5.<u>4</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-485-618-37
                                                                                                                                                                                                                                                                                                                                                                              US-08-362-652-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 52;
```

```
Sequence 37, Application US/08362652 Patent No. 5766850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION UNMBER: US 08/286,8
FILING DATE: 5-AUG-1994
PRIOR APPLICATION UNMBER: US 08/362,6:
APPLICATION UNMBER: US 08/362,6:
APPLICATION UNMBER: US 08/362,6:
APPLICATION UNMBER: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., JOSEPH A.
REFERENCE/DOCKET UNMBER: 38,659
REFERENCE/DOCKET UNMBER: 27866/:
TELLEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA: US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS
                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5766850el Human
NUMBER OF SEQUENCES: 93
                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                 SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                        STREET: 20.
STREET: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: ami
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 435
                                                                                                                                                                COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 1151 amino acids
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        313 LRSI 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  165 LQGI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                114 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            202 ĎPQSLVDPIVQĽQ---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    55 PREQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                  60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               amino acid
                                                                                                                                                                                          Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            312-474-0448
                                                                                                                                                                                                                                  233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15.4%; Score 138.5; DB 1; 28.3%; Pred. No. 7.5e-07; ative 36; Mismatches 71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US 08/286,889
  US/08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      37:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27866/32797
                                                                                                                                                                                                                                                                                                                           2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10;
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-605-672-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-362-652-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence 37, Application US/08605672
Patent No. 5817515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 52; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/3239
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474.6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Gallatin, ". Factory of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of t
                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/605,672
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 1151 amino acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marchall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPAX: 311
TELEPAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Chicago
STATE: Illinois
                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          114 LFFYSE--REANRSRDIGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFFVNDGFQA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165 LQGI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313 LRSI 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 DLYFILDKSGSV-LHHWNBIYYFVBQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.4%; Score 138.5; DB 1
28.3%; Pred. No. 7.5e-07;
ative 36; Mismatches 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               37:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27866/32391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
```

```
RESULT 6
US-08-482-293A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-605-672-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 37, Appli
Patent No. 5831029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
CLASSIFICATION: 530
PRIOR APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION NUMBER: US 08/286,889
APPLICATION NUMBER: US 08/286,889
                                                                                                                                                                                                                                                                                                STREET: Chicago
CITY: Chicago
TNATE: Illinois
THATE:
                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5831029el Human 2 Integrin Alpha Subunit
NUMBER OF SEQUENCES: 103
                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 0
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 21-DEC-1994
                                                                                                                                                         SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
TYPE: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
                                                                                                                                                                              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0.
                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 28.3 
les 52; Conservative
                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                 COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2786
                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313 LRSI 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               165 LQGI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     257 PLEYSDVIPAADKA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           114 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI----ADSKDHVFPVNDGFQA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     202 DPQSLVDPIVQLQ-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/08482293A
                                                                                                                                                                                                                                                                                                                                                             E: Marshall, O'Toole, Gerstein, Murray & Borun 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1151 amino acids
                                                                                                                                                                                                                                       Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15.4%; Score 138.5; DB 1; 28.3%; Pred. No. 7.5e-07; tive 36; Mismatches 71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US 08/286,889
                                                                                                                                        US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
```

10;

201

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-943-363-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-482-293A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 37, Application US/08943363 Patent No. 5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                     FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 1151 amino aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 21-DEC-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el Human 2 Integrin Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 312-1-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 1151 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                APPLICATION NUMBER: US FILING DATE: 5-AUG-1994
                                                                                                                                                                            APPLICATION NUMBER: US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                            CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                STREET:
                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         114 LFFYSE--REANKSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  165 LQGI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPODHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                142 DIAFLIDGSGSINORDFAOMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55 DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED
APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            h 15.4%; Score 138.5; DB 1; Similarity 28.3%; Pred. No. 7.5e-07; 52; Conservative 36; Mismatches 71;
                                                                                                                                                                                                                                                                                                                 RY: United States
60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LRSI 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DPQSLVDPIVQLO-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                          Illinois
                                                                                                                                                                                                                                                                                                                                                                                              3: Marshall, O'Toole, Gerstein, Murray & Borun
233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US 08/362,652
                                      US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-943-363-37
멅
                               Ś
                                                                                                                                                           ORGANISM: Rattus rattus US-09-193-043-37
                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/193,043
CURRENT FILING DATE: 1998-11-16
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1993-12-23
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-08-05
EARLIER FILING DATE: 1994-12-21
EARLIER FILING DATE: 1997-10-03
EARLIER FILING DATE: 1997-10-03
EARLIER FILING DATE: 1997-10-03
NUMBER: 0F 580 ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-193-043-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 37:
SEQUENCE CHARACTERISTICS:
LENGTH: 1151 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                            Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 37, Application US/09193043 Patent No. 6251395
                                                                             Matches
                                                                                                                                                                                                                                            SOFTWARE: PatentIn Ver. SEQ ID NO 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 6551395el Human 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: 27866/35004
                                                                                                                                                                                                    LENGTH: 1151
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 278
REFERENCE/DOCKET NUMBER: 278
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          / Match 15.4%; Score 138.5; DB 1; Local Similarity 28.3%; Pred. No. 7.5e-07; ses 52; Conservative 36; Mismatches 71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Williams Jr., Joseph A. REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                142 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        114 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 164
142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      313 LRSI 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165 LQGI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      55 preqirqgieetokvipggdtymhegferaseqiyyenrqgyrta-sviialtpgelhed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 plyfildksgsv-lhhwneiyyfveqlahkfispqlrmsfivfstrgttlmklte----
                                   1 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----- 54
                                                                                                Similarity
DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              312-474-0448
                                                                             Conservative
                                                                           15.4%; Score 138.5; DB 2;
28.3%; Pred. No. 7.5e-07;
24. Mismatches 71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        37:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27866/32684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1151;
                                                                                  Indels
                                                                                                                      Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25;
                                                                                  25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10
                                                                                    10
```

```
S
                                밁
                                                              ঠ
                                                                                                                                                                      ; NAME/KEY: misc_feature
; LOCATION: 1118
; OTHER INFORMATION: Xaa =
US-09-688-307A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 6432404el Human Beta-2
FILE REFERENCE: 27866/36646
CURRENT APPLICATION NUMBER: US/09/688,307A
CURRENT FILING DATE: 2000-10-13
PRIOR APPLICATION NUMBER: 09/193,043
PRIOR FILING DATE: 1998-11-16
PRIOR APPLICATION NUMBER: 09/605,672
PRIOR APPLICATION NUMBER: 09/173,497
PRIOR APPLICATION NUMBER: 09/286,889
PRIOR FILING DATE: 1994-08-05
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR APPLICATION NUMBER: 08/362,652
PRIOR APPLICATION NUMBER: 08/943,363
PRIOR APPLICATION NUMBER: 08/943,363
PRIOR FILING DATE: 1994-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-688-307A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Pater
SEQ ID NO 37
LENGTH: 1151
TYPE: PRT
                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 37, Applicate Patent No. 6432404 GENERAL INFORMATION:
                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc_feature
LOCATION: 464
OTHER INFORMATION: Xaa = a
NAME/KEY: misc_feature
LOCATION: 486
OTHER INFORMATION: Xaa = a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Rattus rattus
FEATURE:
NAME/KEY: misc_feature
LOCATION: 361
OTHER INFORMATION: Xaa = any or unknown
                                                                                                                                                                                                                                        OTHER INFORMATION: Xaa =
                                                                                                                                                                                                                                                          NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Xaa
                                                                                                                                                                                                                                                                                                          NAME/KEY: misc_feature
                                   142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 257
 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PatentIn Ver.
DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 201
                                                                DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LRSI 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FOGI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PREQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/09688307A
                                                                                                     Conservative
                                                                                                                    15.4%;
                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ۵
0
                                                                                                                                                                                        any
                                                                                                                                                                                                                                                                                                                                              any
                                                                                                                                                                                                                                                                                                                                                                                                any
                                                                                                                                                                                                                                          any
                                                                                                                                                                                                                                                                                            any or unknown
                                                                                                    36;
                                                                                                  Score 138.5; DB
Pred. No. 7.5e-07
%6; Mismatches 7
                                                                                                                                                                                        or unknown
                                                                                                                                                                                                                                                                                                                                              or unknown
                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                          or unknown
                                                                                                                                                                                                                                                                                                                                                                                                  unknown
                                                                                                                                                                                      amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                    amino
                                                                                                                                                                                                                                          amino
                                                                                                                                                                                                                                                                                            amino
                                                                                                                                                                                                                                                                                                                                                amino
                                                                                                                                                                                                                                                                                                                                                                                                  amino
                                                                                                                                DB 2;
                                                                                                     71;
                                                                                                                                                                                                                                          acid
                                                                                                                                                                                                                                                                                                                                                acid
                                                                                                                                                                                                                                                                                                                                                                                                  acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                    acid
                                                                                                                                                                                                                                                                                              acid
                                                                                                  Indels
                                                                                                                                  Length 1151;
                                                                                                  25;
                                                                                                  Gaps
                                                                  54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   113
```

```
RESULT 11
US-08-485-618-55
; Sequence 55, Application
; Patent No. 5728533
                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                             멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Rattus rattus US-09-350-259-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
US-09-350-259-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/350,259
CURRENT FILING DATE: 1999-07-08
EARLIER APPLICATION NUMBER: 09/193,043
EEARLIER APPLICATION NUMBER: 09/193,497
EARLIER APPLICATION NUMBER: 08/173,497
EARLIER FILING DATE: 1993-12-23
EARLIER APPLICATION NUMBER: 08/286,889
EARLIER APPLICATION NUMBER: 08/266,889
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/362,652
EARLIER APPLICATION NUMBER: 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver.
SEQ ID NO 37
LENGTH: 1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 37, App. No. 662091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                    GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5728533e1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EARLIER APPLICATION NUMBER: 08/943,363
EARLIER FILING DATE: 1997-10-03
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Gallatin, Michael W.
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 6620915el Human 2
FILE REFERENCE: 27866/35004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
                                   NUMBER OF SEQUENCES:
                    CORRESPONDENCE ADDRESS:
  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                               313
                                                                                                                                                                                                                                                                                                   165 LQGI 168
                                                                                                                                                                                                                                                                                                                                             257 PLEYSDVIPAADKA--
                                                                                                                                                                                                                                                                                                                                                                                   114 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          142 DIAFLIDGSGSINORDFAOMKDFVKALMGEFASTSTLFSLMOYSNILKTHFTFTEFKNIL 201
                                                                                                                                                                                                                                                                                                                                                                                                                             202 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             165 LQGI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     257 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                202 DPOSLVDPIVOLO----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ch 15.4%; Score 138.5; DB 2; Similarity 28.3%; Pred. No. 7.5e-07; S2; Conservative 36; Mismatches 71;
                                                                                                                                                                                                                                                               LRSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DREQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI----ADSKDHVFPVNDGFQA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LRSI 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application
                                                                                                                                                                                                                                                               316
Marshall, O'Toole, Gerstein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.0
                                       103
                                                                                                                                                             US/08485618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/09350259
                                                                                                                                                                                                                                                                                                                                             -GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                            Human
                                                        2 Integrin Alpha
Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                             256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10
```

```
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; MOLECULE TYPE: protein US-08-485-618-55
                                                                                                                                                                                                 US-08-362-652-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                         Sequence 55, Application US/08362652
Patent No. 5766850
                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 08/286,889 FILING DATE: 5-AUG-1994 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC COMPATION
COMPUTER: PATENTIN Release #1.0, Version
SOFTWARE: PatentIN Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
               APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OP INVENTION: No. 5766850el Human 2 Integrin Alph:
NUMBER OF SEQUENCES: 93
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marchaell, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET:
CITY: C
STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
les 52; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                             165
                                                                                                                                                                                                                                                                                                                                                                                     114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             152 DIAFLIDGSGSINORDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 211
                                                                                                                                                                                                                                                                                                                                               267 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                       212 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD 266
                                                                                                                                                                                                                                                                           323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chicago
Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             amino acid
Chicago
                                                                                                                                                                                                                                                                                                               LQGI 168
                                                                                                                                                                                                                                                                                                                                                                                     LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFFVNDGFQA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                           DREQIROGLEELOKVLPGGDTYMHEGFERASEQIYYENROGYRTA-SVIIALTDGELHED 113
                                                                                                                                                                                                                                                                           LRSI 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.4%; Score 138.5; DB 1
28.3%; Pred. No. 7.6e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/485,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27866/32797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                          2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                   US-08-605-672-55
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                    Sequence 55, Application US/08605672
Patent NO. 5817515
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5817515el
NUMBER OF SEQUENCES: 103
   ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                 NUMBER OF SEQUENCES: 10
                                                                           STREET: 200
STREET: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH:
                                                          COUNTRY: United States
                                                                                                                                  ADDRESSEE:
                                                                           Illinois
                                                                                                             E: Marshall, O'Toole, Gerstein, Murray & Borun
233 South Wacker Drive, 6300 Sear Tower
```

```
; MOLECULE TYPE: protein US-08-362-652-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIPTO:
                                                                                                                                                                                                                                                                                             Query Match 15.4%; Score 138.5; DB 1; Best Local Similarity 28.3%; Pred. No. 7.6e-07; Matches 52; Conservative 36; Mismatches 71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
COMPUTER: IBM PC com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32391
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 312-474-0448
323 LRSI 326
                                    165 LQGI 168
                                                                       267 PLEYSDVIPAADKA---GIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVPKVGN-FAA
                                                                                                          114 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 164
                                                                                                                                                212 DPQSLVDPIVQLQ-
                                                                                                                                                                                                                     152 DIAFLIDGSGSINORDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                   55 DREQIRQGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 113
                                                                                                                                                                                                                                                          1 DLYFILDKSGSV-LHHWNEIYYFYEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                             amino acid
GY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                               1161 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       United
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      55:
                                                                                                                                                  -GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #1.25
                                                                                                                                                                                                                                                                                                                                     Length 1161;
                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                     25;
                                                                                                                                                                                                                                                                                                      Gaps
```

211 54 10

Human

2 Integrin Alpha

```
유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                          US-08-482-293A-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JS-08-605-672-55
                                                                                                                                                                                                                                                                                 Sequence 55, Application US/08482293A Patent No. 5831029 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
ENGTH: 1161 amino aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                              APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5831029el Human 2 Integrin Alphi
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 0: FILING DATE: 23-DEC-1993 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 0: FILING DATE: 5-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 31-
TELEFAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32684
                                                                              COUNTRY: United
ZIP: 60606-6402
                                                                                                               CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                      323
                                                                                                                                                                                                                                                                                                                                                                                                                                                        165 LQGI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             267 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                114 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI----ADSKDHVFPVNDGFQA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               152 DIAFLIDGSGSINORDFAOMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          55 preqirqgleelqkvlpggdtymhegferaseqiyyenrqgyrta-sviialtdgelhed 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52;
                                                                                                                                                                                                                                                                                                                                                                                                                    LRSI 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1161 amino acids
                                                                                               United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US 08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/605,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 138.5; DB : Pred. No. 7.6e-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Version
                                                                                                                                                                                                                             2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
4
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                US-08-943-363-55
                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-482-293A-55
                                                                                                                                                                                                                                                                                                                                          Sequence 55, Appli
Patent No. 5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el
NUMBER OF SEQUENCES: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 21
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 08/362
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                          CORRESPONDENCE ADDRESS: ADDRESSEE: Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
                                                                                                                                                 STREET: 200
STREET: 200
STRY: Chicago
TTY: Tilinoi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                  ZIP: 60606-6402
                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          323 LRSI 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     267 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         114 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              212 DPQSLVDPIVQLQ-----GLTYTATGIRTVMEELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         152 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LQGI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DREQIROGLEELOKVLPGGDTYMHEGFERASEQIYYENROGYRTA-SVIIALTDGELHED
                                                                                                                                                     Illinois
                                                                                                                                                                                                                                                                                                                                                            Application US/08943363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1161 amino acids
                                                                                                                                                                                         3: Marshall, O'Toole, Gerstein, Murray
233 South Wacker Drive, 6300 Sear Towe
                                                                                                                                 United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15.4%; Score 138.5; DB 1; 28.3%; Pred. No. 7.6e-07; tive 36; Mismatches 71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US 08/362,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/08/482,293A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27866/32684
                                                                                                                                                                                                                                                                   Human
                     Version
                                                                                                                                                                                                                                                                 2 Integrin Alpha Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         211
```

```
PILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
PILING DATE: 23-DEC-193
PRIOR APPLICATION NUMBER: US 08/286,889
PILING DATE: 5-AUG-1994
PRIOR APPLICATION NUMBER: US 08/362,652
PILING DATE: 21-DEC-1994
PRIOR APPLICATION NUMBER: US 08/362,652
PILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32684
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEPAX: 312-474-6300
TELEPAX: 312-474-6300
TELEPAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEG ID NO: 55:
SEQUENCE CHARACTERISTICS:
LENGTH: 1161 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-943-363-55
                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                         ঠ
Search completed: December 14, 2005, 11:21:08 Job time : 16.6012 secs
                                                                                          밁
                                                                                                                      र्
                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 15.4%; Score 138.5; DB 1; Length 1161; Best Local Similarity 28.3%; Pred. No. 7.6e-07; Matches 52; Conservative 36; Mismatches 71; Indels 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 530
                                                                                                                                                                                                                   114 LFFYSE--REANRSRDLGAIVYCVGVKD-FNE-TQLARI-----ADSKDHVFPVNDGFQA 164
                                                                                                                                                                                                                                                                  212 DPQSLVDPIVQLQ-----GLTYTATGIRTVMBELFHSKNGSRKSAKKILLVITDGQKYRD
                                                                                          323
                                                                                                                                  165 LQGI 168
                                                                                                                                                                            267 PLEYSDVIPAADKA---GIIRYAIGVGDAFQEPTALKELNTIGSAPPQDHVFKVGN-FAA 322
                                                                                                                                                                                                                                                                                                                                                          152 DIAFLIDGSGSINQRDFAQMKDFVKALMGEFASTSTLFSLMQYSNILKTHFTFTEFKNIL 211
                                                                                                                                                                                                                                                                                                                   55 DREQIRQGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALTDGELHED 113
                                                                                                                                                                                                                                                                                                                                                                                      1 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE-----
                                                                                          LRSI 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/08/943,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels 25; Gaps
                                                                                                                                                                                                                                                                           266
                                                                                                                                                                                                                                                                                                                                                                                                           54
```

```
Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seg length: 0 seg length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, s derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query
Match
        1000.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 December 14, 2005, 11:18:07; Search time 52:1196 Seconds (without alignments)
1386.897 Million cell updates/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1867569 seqs, 417829326 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-970-076-2_COPY_44_216
899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Published Applications AA Main:*
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DLYFILDKSGSVLHHWNEIY.....HVFPVNDGFQALQGIIHSIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
        GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapext 0.5
  US-10-038-307-26
US-09-796-753-12
US-09-796-753-12
US-10-038-307-2
US-11-047-278-8
US-11-047-278-8
US-11-047-278-2
US-11-047-278-2
US-10-201-292-24
US-11-047-278-2
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-36
US-10-201-292-37
US-10-201-292-38
US-10-201-292-39
US-10-201-292-39
US-10-201-292-39
US-10-201-292-39
US-10-201-292-39
US-10-301-292-19
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-301-307-20
US-10-408-765A-1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               alignments)
Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rtd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1867569
sequence 26, Appl
sequence 27, Appli
sequence 2, Appli
sequence 2, Appli
sequence 2, Appli
sequence 2, Appli
sequence 22, Appli
sequence 24, Appl
sequence 24, Appli
sequence 24, Appli
sequence 27, Appli
sequence 28, Appli
sequence 28, Appli
sequence 30, Appli
sequence 30, Appli
sequence 31, Appli
sequence 36, Appli
sequence 37, Appli
sequence 38, Appli
sequence 31, Appli
sequence 31, Appli
sequence 31, Appli
sequence 32, Appli
sequence 33, Appli
sequence 31, Appli
sequence 21, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 23, Appli
sequence 232, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 233, Appli
sequence 234, Appli
sequence 235, Appli
sequence 236, Appli
sequence 237, Appli
sequence 238, Appli
sequence 239, Appli
sequence 230, Appli
sequence 230, Appli
sequence 231, Appli
sequence 232, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
                                                                                                                                                                                                      RESULT 2
US-10-201-292-26
                                                                                                                                                                                                                                                                                                                      ર્ક
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
Sequence 26, Application US/10201292
Publication No. US20030144193A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTWAN
APPLICANT: Theresa L. O'KEEPE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
APPLICANT: JUNINTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                          164
                                                                                                                                                                                                                                                                                                               121 EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL
                                                                                                                                                                                                                                                                                                                                                                      104 QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   173;
                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                       44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                          EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL
                                                                                                                                                                                                                                                                                                                                                                                                QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                       DLYFILDKSGSVLHHMNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
```

0,

Mismatches

0;

Indels

0

Gaps

0

120 163

103

28	899	100.0	564		US-10-474-794-232	Sequence 232, App
29	9		σ.		-10-979-159-18	187, Ap
30	668	100.0	564	<b>υ</b>	-10-979-	Sequence 232, App
31	899	•	σ		11-047-278-6	
32	894	99.4	403		09-833-245-	620
33	890	9	562		9-918-715-1	194,
34	890	9	562		US-09-918-715-301	
35	890	9.	562		0-474-794-	194,
36	890	9	562		US-10-474-794-301	301,
37	068	9	562		10-979-159-	194,
38	068	۰	562		10-979-159-3	
39	878	7.	534		10-038-307-1	
40	878	7.	534		10-201-292-	12,
41	878	.7	543		US-10-038-307-10	10,
42	878	7.	4		10-038-307-	14,
43	878	.7	543		10-038-307-	16,
44	878	97.7	543	4.	US-10-201-292-10	10,
45	878	97.7	4	4	-10-201-292-	14,
					ALIGNMENTS	
ESULT 1 S-10-038-307-26 Sequence 26, Ap Publication No.	307-2 26, 10n N	26 Application US/10038307 0. US20030134786A1	lication US/100 US20030134786A1	100 6A1	38307	
GENERAL INFORMATION: APPLICANT: James B. APPLICANT: Theresa APPLICANT: Engin O APPLICANT: Judith TITLE OF INVENTION:	INFOR	CIÑ	ROTTMAN L. O'KEEFE KAYNAK . HEALEY	H	and Tango 216 Compositions	s and Methods
CURRENT	APPL FILII	FILE REFERENCE: 7853-253-999 CURRENT APPLICATION NUMBER: CURRENT FILING DATE: 2002-0	NUMBER: 2002-	US/1	US/10/038,307 6-28	
NUMBER OF	OF SEQ	SEQ ID NOS:	26 26	õ	Version A O	
SEQ ID NO	ν.				:	
LENGTH:						
	¥.	Homo sapiens	ns			
S-10-038-307-	N	o				
Query Match Best Local		Similarity	100.0%;	0 <b>%</b> ;	Score 899; DB 4; Length Pred. No. 1.1e-86;	th 328;
	,				,	,

```
; CURRENT FILING DATE: 200; NUMBER OF SEQ ID NOS: 36; SOFTWARE: FBSTSEQ for Wir; SEQ ID NO 26; LENGTH: 328; TYPE: PRT; ORGANISM: Homo sapiens US-10-201-292-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 3
US-09-796-753-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/796,753
CURRENT FILING DATE: 2001-03-01
PRIOR APPLICATION NUMBER: 09/183,175
PRIOR FILING DATE: 1998-10-30
PRIOR PRIOR APPLICATION NUMBER: 09/223,094
PRIOR FILING DATE: 1998-12-30
PRIOR APPLICATION NUMBER: 09/223,546
PRIOR APPLICATION NUMBER: 09/223,546
PRIOR FILING DATE: 1998-12-30
PRIOR APPLICATION NUMBER: 09/24,246
PRIOR APPLICATION NUMBER: 09/24,246
PRIOR PILING DATE: 1998-12-30
PRIOR APPLICATION NUMBER: 09/259,388
PRIOR APPLICATION NUMBER: 09/259,388
PRIOR APPLICATION NUMBER: 09/259,388
PRIOR APPLICATION NUMBER: 60/122,458
PRIOR FILING DATE: 1999-03-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 12, Application US/09796753 Publication No. US20030027998A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 173;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: FILE REFERENCE: 785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 09/
                                                                                                                                                                                                                                                               APPLICATION NUMBER: 09/365,164
                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 1999-0
                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                             APPLICATION NUMBER: 09/
FILING DATE: 2000-02-25
                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 1999-
                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                      APPLICATION NUMBER:
                                                                                                     APPLICATION NUMBER: 0
FILING DATE: 1999-12-
                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                    FILING DATE:
              APPLICATION NUMBER:
                                                                    FILING DATE:
                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 QGLEELQKVLPGGDTYMHEGFERÅSEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DLYFILDKSGSVLHHMNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EANRSRDIGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           McCarthy, Sean A.

IVENTION: SECRETED PROTEINS AND USES

INCE: 7853-227-999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TE: 2003-02-14
NOS: 36
for Windows Version 4.0
                                                                                                                                        1999-12-23
                                                                                                                                                                                                                                                                                                                                                               1999-05-14
1999-05-14
MHER: 09/336,536
                                                                    1999-12-29
                                                                                                                                                                           1999-09-30
                                                                                                                                                                                                             1999-09-20
                                                                                                                                                                                                                                               1999-07-30
                                                                                                                                                                                                                                                                                                                    1999-06-29
                                                                                                                                                                                                                                                                                                                                                      1999-06-18
2000-03-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 899; DB 4; 100.0%; Pred. No. 1.1e-86;
                                                                                09/474,072
                                                                                                                                                                                                                              09/399,723
                                                                                                                                                                                                                                                                                                                                     09/342,687
                                                                                                                       09/474,071
                09/516,745
                                                                                                                                                        09/471,179
                                                                                                                                                                                             09/409,634
                                                                                                                                                                                                                                                                                                  09/345,464
                                                                                                                                                                                                                                                                                                                                                                                                       09/312,359
                                                 09/514,010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 328;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6
```

```
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              묽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-796-753-12
                                      문
                                                                                                                       밁
                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                         ) ORGANISM: Homo sapiens
US-10-038-307-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-038-307-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 09/59
PRIOR FILING DATE: 2000-06-19
PRIOR APPLICATION NUMBER: 09/59
PRIOR FILING DATE: 2000-06-22
PRIOR APPLICATION NUMBER: 09/63
PRIOR FILING DATE: 2000-07-31
PRIOR APPLICATION NUMBER: 09/60
PRIOR FILING DATE: 2000-06-29
PRIOR FILING DATE: 2000-06-29
PRIOR FILING DATE: 2000-06-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 12
LENGTH: 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions
FILE REFERENCE: 7853-253-999
FILE REFERENCE: 7853-253-999
                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/10038307
Publication No. US20030134786A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                        Matches 173;
                                                                                                                                                                                                                              Query Match 100.0%; Score 899; DB 4; Best Local Similarity 100.0%; Pred. No. 1.1e-86;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 173;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 09/677,751
PRIOR FILING DATE: 2000-09-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 33
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 09/606,317
FILING DATE: 2000-06-29
APPLICATION NUMBER: 09/665,666
FILING DATE: 2000-09-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 164 EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 BANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSIL 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                104 ÖĞLEELÖKVLPĞĞDTYMHEĞFERASEQIYYENRQĞYRTASVIIALTDĞELHEDLFFYSER
121 EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44
                                                                  44 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPOLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                               1 DLYFILDKSGSVLHHWNBIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                          QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 899; DB 3; ilarity 100.0%; Pred. No. 1.1e-86; Conservative 0; Mismatches 0;
                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000-05-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09/606,565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09/630,334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09/597,993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09/599,596
                                                                                                                                                                                                          0
                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                 Length 333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and Methods
                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                              103
                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                               0
```

밁

164

GENERAL INFORMATION:

APPLICANT: Young, John A.T.

APPLICANT: Bradley, Kenneth A.

APPLICANT: Collier, Robert J.

APPLICANT: Collier, Robert J.

APPLICANT: Mogridge, Jeremy S.

ITILE OF INVENTION: Anthrax Toxin Receptor FILE REFERENCE: 96026, 97745

CURRENT APPLICATION NUMBER: US/11/047,278

CURRENT FILING DATE: 2005-01-31

PRIOR APPLICATION NUMBER: US/09/970,076

PRIOR FILING DATE: 2001-10-03

PRIOR PRILING DATE: 2001-12-05

NUMBER OF SEG ID NOS: 10

SOFTWARE: Patentin Ver. 2.1

SEG ID NOS: 1 ई 밁 ঠ 밁 S श LENGTH: 333
TYPE: PRT
ORGANISM: Homo sapiens
US-11-047-278-8 용 ; LENGTH: 333 ; TYPE: PRT ; ORGANISM: Homo Bapiens US-10-201-292-2 RESULT 5 US-10-201-292-2 US-11-047-278-8 APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Dudith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 20 Sequence 8, Application US/11047278 Publication No. US20050196407A1 Sequence 2, Application US/10201292 Publication No. US20030144193A1 GENERAL INFORMATION: Query Match Best Local Matches 173; Query Match 100.0%; Best Local Similarity 100.0%; Matches atch 100.0%; cal Similarity 100.0%; 173; Conservative 0 104 164 121 EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 173 61 QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER 120 44 1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR 60 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR 60 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR 103 EANRSRDIGATVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 216 QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER Conservative <u>,</u> <u>.</u>. Score 899; DB 6; Pred. No. 1.1e-86; ); Mismatches 0; Score 899; DB 4; Pred. No. 1.1e-86; Mismatches Length 333; Length 333; Indels Indels 0; 0 Gaps 163

```
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: Udith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 22
LENGTH: 342
TYPE: PRT
ORGANISM: Homo sapiens
US-10-038-307-22
                                                                                                       ; ORGANISM: Homo sapiens US-10-201-292-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
US-10-201-292-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
US-10-038-307-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                               GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Dudith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARB: FASESEQ for Windows Version 4.0
SEQ ID NO 22
Query Match 100.0%; Score 899; DB 4; Best Local Similarity 100.0%; Pred. No. 1.2e-86; Matches 173; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 22, Application US/10201292 Publication No. US20030144193A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 173;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 22, Application US/10038307
Publication No. US20030134786A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                       LENGTH: 342
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Match 100.0%; Score 899; DB 4; Local Similarity 100.0%; Pred. No. 1.2e-86; O; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSIL 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSIL 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         164 BANKSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           104 QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 QGLEBLQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 53 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 μ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 342;
                                                  Length 342;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          225
```

Indels

0

Gaps

```
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: Udith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT FILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FeatSEQ for Windows Version 4.0
SEQ ID NO 24
LENGTH: 345
TYPE: PRT
CORGANISM: Homo sapiens
US-10-038-307-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                          RESULT 10
US-10-201-292-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-201-292-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-038-307-24
                                                                             APPLICANT: James B. ROTIMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYUAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PAST-SEQ for Windows Version 4.0
SEQ ID NO 24
SEQ ID NO 24
                                                                                                                                                                                                                                                                                                                           Sequence 24, Application US/10201292 Publication No. US20030144193A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 24, Application US/10038307 Publication No. US20030134786A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 173;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DLYFILDKSGSVLHHMNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 899; DB 4;
Pred. No. 1.2e-86;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 345;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
```

```
GENERAL INFORMATION:
APPLICANT: Young, John A.T.
APPLICANT: Young, John A.T.
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor FILE REFERENCE: 960256, 97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR APPLICATION NUMBER: 05/051,481
PRIOR APPLICATION NUMBER: 00/251,481
PRIOR FILING DATE: 2001-12-05
NUMBER OF SEQ ID NOS: 10
SOFTMARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF546PCT
CURRENT APPLICATION NUMBER: US/09/833,245
CURRENT FILING DATE: 2001-04-12
PRIOR APPLICATION UMBER: 60/229, 358
PRIOR FILING DATE: 2000-04-12
PRIOR APPLICATION NUMBER: 60/256, 931
PRIOR FILING DATE: 2000-12-21
                                                                                                                                                                                                                                                                   US-09-833-245-621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-11-047-278-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-11-047-278-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Sin
Matches 173;
                                                                                                                                                                                                Sequence 621, Application US/09833245
Publication No. US20040010134A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2, App
Publication No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 173;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 368
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                  121 EANRSRDLGAIVYCVGVKDENETQLARIADSKDHVEFVNDGFQALQGIIHSIL
                                                                                                                                                                                                                                                                                                                                                                                                                                        104 QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      104 QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        44 DLYFILDKSGSVLHHMNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QGLEELQKVLPGGDTYMHEGFERASEQTYYENRQGYRTASVITALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/11047278 No. US20050196407A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSIL 173
                                                                                                                                                                                                                                                                                                                                                     EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 899; DB 4; llarity 100.0%; Pred. No. 1.2e-86; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 899; DB 6; 100.0%; Pred. No. 1.3e-86;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 368;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 345;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                              173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   216
                                                                                                                                                                                                                                                                                                                                                        216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           103
                                                                                                                                                                                                                                                                                                                                                                                                                                          163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
```

Mon

Dec

19 09:29:41 2005

```
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Con
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 28
LENGTH: 460
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 13
US-10-201-292-28
/ Sequence 28, Application US/10201292
/ Publication No. US20030144193A1
                                                                                                       RESULT 14
US-10-201-292-30
                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                         흅.
                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-833-245-621
                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                      Sequence 30, Application US/10201292 Publication No. US20030144193A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/199, PRIOR FILING DATE: 2000-04-25 NUMBER OF SEQ ID NOS: 2267 SOPTWARE: PATENTIN Ver. 2.1 SEQ ID NO 621 LENGTH: 403
                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 173;
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens -10-201-292-28
                                                                                                                                                                                                                                                                                                                                                                                                       y Match 100.0%; Score 899; DB 4; Local Similarity 100.0%; Pred. No. 1.8e-86; hes 173; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                           104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          104
                                                                                                                                                                                     164
                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    164
                                                                                                                                                                                                                                                                                             13
                                                                                                                                                                                                                                                                                                                                 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44
                                                                                                                                                                                                                                                                                                                                                    1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                               DLYFILDKSGSVLHHMNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 173
                                                                                                                                                                                                          EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSIL 173
                                                                                                                                                                                                                                                                                QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGBLHEDLFFYSER 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                               EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 216
                                                                                                                                                                                                                                                           QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 899; DB 3;
Pred. No. 1.5e-86;
D; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 460;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 403;
                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and
                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  103
                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          163
```

Search Job tim

completed: December ne : 53.2862 secs

14,

2005,

11:59:01

time

```
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: MUSIT OZKAYNAK
APPLICANT: JUDITH J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Com
FILE REFERENCE: 7853-253-999
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 32
                                                                              밁
                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 460
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-201-292-30
                            Ş
                                                                                                                                                              밁
                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
US-10-201-292-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; APPLICANT: Judith J. HEALBY
; TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
; FILE REFERENCE: 7853-253-999
; CURRENT APPLICATION NUMBER: US/10/201,292
; CURRENT FILING DATE: 2003-02-14
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSEQ for Windows Version 4.0
; SOFTWARE: FastSEQ for Windows Version 4.0
; LENGTH: 1.7
                                                                                                                                                                                                                                                                                                                                      US-10-201-292-32
                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 173; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 32, Application US/10201292
Publication No. US20030144193A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%; Score 899; DB 4; Best Local Similarity 100.0%; Pred. No. 1.8e-86; Matches 173; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                   LENGTH: 479
TYPE: PRT
ORGANISM: Homo sapiens
                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFFVNDGFQALQGIIHSIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   104
164
                                                                                104 QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    44 DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                          EANRSRDIGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL
                                                                                                   QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                   DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
                                                                                                                                                                                        DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QGLEELQKVLPGGDTYMHEGFERASEQIYYENRQGYRTASVIIALTDGELHEDLFFYSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DLYFILDKSGSVLHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTEDREQIR
BANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL
                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                 100.0%; Score 899; DB 4;
100.0%; Pred. No. 1.9e-86;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Compositions
                                                                                                                                                                                                                                                                                          Length 479;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                163
                                                                                                                                                                   103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        163
                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

THIS PAGE BLANK (USPTO)

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Searched
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   score greater than or equal to the score of the result beir and is derived by analysis of the total score distribution.
                                                   103.5
101.5
101.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  128.5
118.5
108
108
108
108
104
104
104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Published Applications AA_New:*

1: /cgn2_6/ptodata/1/pubpaa/USOS_NEW_PUB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/USOS_NEW_PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/USOS_NEW_PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/USOS_NEW_PUB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/USOS_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/USIO_NEW_PUB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/USIO_NEW_PUB.pep:*

8: /cgn2_6/ptodata/1/pubpaa/USOSO_NEW_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       is the number of results predicted by chance to have a ater than or equal to the score of the result being printed,
           100.0
132.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
122.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
120.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 7 6 5 4 3 2 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-2_COPY_44_216
899
1 DLYFILDKSGSVLHHWNEIY.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              December 14, 2005, 11:18:48; Search time 2.54242 Seconds (without alignments) 458.218 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        51441 seqs, 6734002 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DLYFILDKSGSVLHHWNEIY.....HVFPVNDGFQALQGIIHSIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
           564
11562
3063
3063
11141
11140
11188
11188
11188
11188
11188
11188
11188
11188
11188
11188
11188
11188
11188
11188
11188
11188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          띪
                                       US-11-186-284-199
US-11-186-284-24
US-11-186-284-24
US-11-601-368-22
US-10-601-368-22
US-10-601-368-3
US-10-601-368-4
US-10-601-368-3
US-11-000-463-338
US-11-000-463-338
US-11-007-047-1
US-10-913-18-264-294
US-10-131-8264-294
US-11-131-8264-294
US-11-1955-561-983
US-11-097-125-1
US-11-097-125-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     51441
Sequence 199, App
Sequence 4, Appli
Sequence 26, Appli
Sequence 27, Appl
Sequence 21, Appli
Sequence 21, Appli
Sequence 4, Appli
Sequence 6, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 25, Appli
Sequence 27, Appli
Sequence 27, Appli
Sequence 1034, App
Sequence 1034, App
Sequence 294, Appli
Sequence 7, Appli
Sequence 981, Appli
Sequence 982, Appli
Sequence 981, App
Sequence 981, App
Sequence 982, App
Sequence 982, App
Sequence 982, App
Sequence 982, App
Sequence 982, App
Sequence 982, App
Sequence 981, App
Sequence 982, App
Sequence 982, App
Sequence 982, App
Sequence 981, App
Sequence 981, App
Sequence 982, App
Sequence 981, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
```

•	음 성 음	ž m o δ	US - S GPS		
		Query Ma Best Loo Matches	RESULT 1 Sequence 19 Sequence 19 Publication GENERAL INF APPLICANT: APPLICANT		0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	44 DLYF. 61 QGLE	atch cal & 173	28 p: OBO of bibliblib ABR NNN NNN NN NN NN NN NN NN NN NN NN NN		86.5 81.5 81.5 74 73.5 72 70 70 69.5 68.5 68.5 68.5 68.5 68.5 68.5 68.5 68
	DLYFILDKSGSVLHHWNEIYY OGLEELQKVLPGGDTYMHEGF	arit; onse:	Haring DATE: 2002-12 LING DATE:		777777777788889999
	ELQKVLPGGDTYMHE	100 y 100 rvative	ation US/111 050266493A1 um Pharmaceu Allison ette, Tracy ette, Shubhargi 1, Robert 1, Robert 1, Robert 2, John B. 1, WYEL GENES WETHOODS FO THERAPY OFF 01-029PZRNM MUMBER: US/10 2002-11-21 UMBER: US/10 2002-11-21 UMBER: US 60 2001-12-10 UMBER: US 60 2002-03-05 2002-03-05 2002-03-05 2002-05-20 S: 228 05 978		1167 678 353 3448 3448 389 509 264 786 292 292 242 21734 1734 348 348 469 242 242 242 242 242 242 242 242 242 24
	H H N	. 0 # WNE	US/111 4493A1 1maces son Tracy Tracy bhangi ence c ence c GENES GENES US/11-21 US/11-21 US/11-21 US/11-21 US/11-21 US/11-21 US/11-21 US/11-21 US/11-21 US/11-21 US/11-21 US/11-21 US/11-21 US/11-21 US/11-21 US/11-21 US/11-21		000100110000000001111
FVEQLAHKFISPQLRMSFIVFS ERASEQIYYENRQGYRTASVII	FVEQLAHKFISPQLRMSFIVE ERASEQIYYENRQGYRTASVI              ERASEQIYYENRQGYRTASVI	; Score 899; DB 7; Le; ; Pred. No. 2.6e-81; O; Mismatches O; II  YYFVEOLAHKFISPOLRMSFIVE;	86284 L: L: L: L: L: L: L: L: L: L: L: L: L:	ALIGNMENTS	US-11-097-125-2 US-11-137-465-44 US-11-137-465-45 US-10-137-465-45 US-10-137-465-45 US-10-137-656-288 US-10-793-626-288 US-10-793-626-288 US-10-793-626-2636 US-10-467-657-7306 US-10-467-657-7306 US-11-192-967-6 US-11-193-715-6 US-11-674-767-700 US-10-467-657-7066 US-11-122-240-70 US-10-167-657-7272 US-10-467-657-7272
	STRGTTLMKLTEDREQIR 103 STRGTTLMKLTEDREQIR 103 STALTDGELHEDLFFYSER 120 STALTDGELHEDLFFYSER 163	h 564; ls 0; GTTLMKLTE	SESSMENT, PREVENTION, AND		Sequence 2, Appli Sequence 34, Appl Sequence 44, Appl Sequence 158, Appl Sequence 158, Appl Sequence 2880, Appl Sequence 2836, Appl Sequence 2636, Appli Sequence 7846, Appli Sequence 6, Appli Sequence 6, Appli Sequence 4, Appli Sequence 7066, Appli Sequence 7066, Appli Sequence 7066, Appli Sequence 70, Appl Sequence 70, Appl

121 EANRSRDLGAIVYCVGVKDFNETQLARIADSKDHVFPVNDGFQALQGIIHSIL 173

뭉

164

```
APPLICANT: Berger, Allison
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Schlegel, Robert
APPLICANT: Schlegel, Robert
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSIVE TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSIVE TITLE OF INVENTION: THERAPY OF COLON CANCER FILE REFERENCE: MPMO1-029P2RNM
CURRENT FILING DATE: 2005-07-21
PRIOR APPLICATION NUMBER: US/11/186,284
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US/0/339,971
PRIOR FILING DATE: 2001-12-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-11-186-284-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-11-080-026-4
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 26, Application US/11186284 Publication No. US20050266493A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 60/229,700
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 4
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 4, Application US/11080026 Publication No. US20050260192A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lu, Chafén
TITLE OF INVENTION: MODIFIED POLYPEPTIDES STABILIZED IN A
TITLE OF INVENTION: DESIRED CONFORMATION AND METHODS FOR
FILE REFERENCE: CFBF-P02-021
CURRENT APPLICATION NUMBER: US/11/080,026
CURRENT FILING DATE: 2005-03-15
PRIOR APPLICATION NUMBER: 09/945,265
PRIOR FILING DATE: 2001-08-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Springer, Timothy A. APPLICANT: Shimaoka, Motomu APPLICANT: Lu, Chafen
                                                                                                                                                                                                                                                                                                                                                APPLICANT: Millennium Pharmaceuticals, APPLICANT: Berger, Allison APPLICANT: Guillemette, Tracy L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 11
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FTFKEFQNNPNPRSLVKPITQLL--GRTHTATGIRKVVRELFNITNGARKNAFKILVVIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DIAFLIDGSGSIIPHDFRRMKEFVST-----VMEQLKKSKTLFS-----LMQVSEEFRIH 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DLYFILDKSGSVL-HHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTED----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----REQIROGLEELOKVLPGGDTYMHEGFERASEQIYYENRQGYRTA-SVIIALT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VNN-FEALKTI 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VNDGFQALQGI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DGEKFGDPLGYEDVIPEADRE---GVIRYVIGVGDAFRSEKSROELNTIASKPPRDHVFQ 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DGELHEDLFFYSE--REANRSRDLGAIVYCVGVKDFNETQLAR-----IADS--KDHVFP 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14.3%; Score 128.5; DB 7 26.7%; Pred. No. 5.6e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        38; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63;
                                                                                                                                                                                            ASSESSMENT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1152;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRODUCING
                                                                                                                                                                                              PREVENTION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11,
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo US-11-186-284-26
                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                          Ş
                                                                        밁
                                                                                                          Ś
                                                                                                                                                밁
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                       US-10-601-368-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-601-368-24
                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 24
LENGTH: 1141
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 24, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR FILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: LOTE, JOSE M.
TITLE OF INVENTION. THE INTEGRIN ALPHA SUBUNIT AND USES THEREOF FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US/09/561,263A PRIOR FILING DATE: 2000-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Pan, Yang APPLICANT: Lora, Jo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 30
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          111 HEDLFFYSEREANRSRDLGAIVYCVGVKDFNETQLARIAD--SKDHVFPVNDGFQALQGI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      553 SSDAF----RDPÄIKLRNSDVEIFAVGVKDAVRSELEAIASPPAETHVFTVED-FDAFQRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                500 VEDII----EAINTFPYRGGSTNTGKAMTYVREKIFVPSK-GSRSNVPKVMILITDGK-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            440 DIVFLVDGSYSIGIANFVKVRAFLEVLVKSFEISPNRVQISLVQYSRDPHTEFTLKKFTK
                                  150
                                                                                                                                                                                                                            164 DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGFGQIQVGIVQYGEDAVHEFHL-NDYRS
                                                                                                                                                                                                                                                                                                        48;
                                                                                                                                                                                        59 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 DLYFILDKSGSV-LHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFST---RGTTLMKLTE 54
                                                                                                                                                                                                                                                                  1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DREQIRQGLEELQKVLP--GGDTYMHEGFERASEQIYYENRQGYRT--ASVIIALTDGEL 110
--KDIVDALGDRIFSLEG
                                  DSKDHVFPVNDGFQALQG
                                                                        LEKVIROSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL- 338
                                                                                                                                                  VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGKKGAK--KVMIVITDGESHDSPD
                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sapiens
                                                                                                                                                                                                                                                                                              12.0%; 5cc
/ 24.2%; Pred
twe 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13.2%;
                                                                                                              ----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQLARIA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       35;
                                  167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 118.5; DB Pred. No. 0.0019;
                                                                                                                                                                                                                                                                                                                            Score 108; DB 6;
Pred. No. 0.0058;
                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68;
                                                                                                                                                                                                                                                                                                                                              Length 1141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 3063;
                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                            38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23;
                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : 499
                                                                                                                                                                                                                                                                      88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    552
                                                                                                                                                        279
                                                                                                                                                                                          113
                                                                                                                                                                                                                                221
```

```
i NAME/KEY: SIGNAL
; LOCATION: (1)...(22)
US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
US-10-601-368-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ) ORGANISM: Mus musculus 
US-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-601-368-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOPTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 22
LENGTH: 1166
TYPE: PRT
Query Match 12.0%;
Best Local Similarity 24.2%;
Matches 48; Conservative 2
                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 21
LENGTH: 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 22, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                       APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
APPLICANT: Lora, Jose M.
APPLICANT: Lora, Jose M.
APPLICANT: Lora, Jose M.
APPLICANT: Lora, Jose M.
FITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR FILING DATE: 2000-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: LOTA, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 09/322,790 PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Pan, Yang APPLICANT: Lora, Jos
                                                                                                                                ORGANISM: Mus musculus FEATURE:
                                                                                                                                                                    TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            258 LEKVIRQSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      200 VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        --KÖIVDALGÖRIFSLEĞ 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DSKDHVFPVNDGFQALQG 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12.0%; Score 108; DB 6; Length 1166; 24.2%; Pred. No. 0.006;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQLARIA 149
; Score 108; DB 6; Length 1188; 
; Pred. No. 0.0061; 
28; Mismatches 84; Indels 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     38;
 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
 9
                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                      맑
                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 7
US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                US-10-601-368-4
                                                                                                                                RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-601-368-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                         Sequence 4, Application US/10601368 Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6, Application US/10601368 Publication No. US20050260702A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Pan, Yang APPLICANT: Lora, Jose M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
NAME/KEY: SIGNAL
LOCATION: (1)...(22)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 1141
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                      339 --KDIVDALGDRIFSLEG
                                                                                                                                                                                                                         150 DSKDHVFPVNDGFQALQG 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              150 DSKDHVFPVNDGFQALQG 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           339 --KDIVDALGDRIFSLEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           354
                                                                                                                                                                                      354
```

```
GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 11.6%; Score 104; DB 6
Best Local Similarity 24.2%; Pred. No. 0.014;
Matches 48; Conservative 28; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND FILE REFERENCE: 07334-275001
                                                                                                                                                                                                                                                                                                                                                                                                                 280 LEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        222 VKDVVÉAASHIEQRÉGTETRTAFGIEFARSÉAFQKGGRKGAK--KVMÍVITDGÉSHDSPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         164 DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGIVQYGEDAVHEFHL-NDYRS 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  164 DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGVVQYGEDVVHEFHL-NDYRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        59 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        59 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LEKVIROSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VKDVVBAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----FNETQLARIA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -LFFYSEREANRSRDLGAIVYCVGVKD----FNETQLARIA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
```

FILE REFERENCE: 07334-275001

```
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOPTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 4
LENGTH: 1166
TYPE: PRT
밁
                                     ঠ
                                                                                    В
                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
US-10-601-368-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo sapiens US-10-601-368-4
                                                                                                                                                                                                                                                                       ; NAME/KEY: SIGNAL ; LOCATION: (1)...(22) US-10-601-368-3
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: LOTA, JOSE M.

TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF, FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: PASTSEQ for Windows Version 3.0
SEQ ID NO 3
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3, Application US/10601368
Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
                                                                                                                                                                                  Matches
                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Pan, Yang APPLICANT: Lora, Jos
                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 24.2
nes 48; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          317 --KDIVDALGÓRIFSLEG 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            258 LEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200 VKDVVÉAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD
  222
                                                                                       164 DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGVVQYGEDVVHEFHL-NDYRS 221
                                            59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ
VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD 279
                                                                                                                          DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ------FNETQLARIA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DIVIVLDGSNGI-YPWVEVQHFLINILKKFYIGPGQIQVGVVQYGEDVVHEFHL-NDYRS
                                       IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DSKDHVFPVNDGFQALQG 167
                                                                                                                                                                              11.6%; Score 104; DB 6; Length 1188; ilarity 24.2%; Pred. No. 0.015; Conservative 28; Mismatches 84; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11.6%; Score 104; DB 6; Length 1166;
24.2%; Pred. No. 0.015;
ative 28; Mismatches 84; Indels 3
                                                                                                                                                                                38;
                                                                                                                                                                              Gaps
                                          113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199
                                                                                                                                      58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
```

```
APPLICANT: Webfman, Tom
APPLICANT: Zhang, Jie
APPLICANT: Zhang, Jie
APPLICANT: Zhou, Ping
APPLICANT: Cao, Yi-Cheng
APPLICANT: Cao, Yi-Cheng
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides
FILE REFERENCE: 785CIP4CN
CURRENT APPLICATION NUMBER: US/11/000,463
CURRENT FILING DATE: 2004-11-29
PRIOR APPLICATION NUMBER: 10/291,265
PRIOR FILING DATE: 2002-11-08
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 99/22,279
PRIOR APPLICATION NUMBER: 09/32,279
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/631,451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ß
                                                                                                                    Ś
                                                                                                                                                                 밁
                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
US-11-000-463-338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                Ś
                                                                               밁
                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                     US-11-000-463-338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMALL...
GENERAL INFORMALL...
APPLICANT: Tang, Y Tom
APPLICANT: Liu, Chenghua
PritCANT: Liu, Chenghua
PritCANT: Liu, Chenghua
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 338
LENGTH: 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 338, Appublication No.
                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 09/633,870
                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 2000-08-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              114
                                    150 DSKDHVFPVNDGFQALQG 167
                                                                                                                                                                                                                                               164 DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGFGQIQVGVVQYGEDVVHEFHL-NDYRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       339 --KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          150 DSKDHVFPVNDGFQALQG 167
                                                                                                                                                                                                                                                                                                                                 48;
                                                                                                                                                                                                      59 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                        1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL- 338
  --KDIVDALGDRIFSLEG
                                                                               LEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL-
                                                                                                                                                               VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGKKGAK--KVMIVITDGESHDSPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qian, Xiaohong
Wang, Zhiwei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chen, Rui-hong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/11000463
b. US20050266423A1
                                                                                                                                                                                                                                                                                                                               11.6%; Score 104; DE vilarity 24.2%; Pred. No. 0.01 Conservative 28; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQLARIA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
354
                                                                                                                                                                                                                                                                                                                                                   Score 104; DB 7
Pred. No. 0.015;
                                                                                                                      -LFFYSEREANRSRDLGAIVYCVGVKD----FNETQLARIA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.0
                                                                                                                                                                                                                                                                                                                                                                        DB 7;
                                                                                                                                                                                                                                                                                                                                   84;
                                                                                                                                                                                                                                                                                                                                                                          Length 1188;
                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                   38;
                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                    338
                                                                                                                                                                    279
                                                                                                                                                                                                          113
                                                                                                                                                                                                                                                    221
```

```
RESULT 12
US-10-601-368-25

I Sequence 25, Application US/10601368

I Publication No. US20050260702A1

GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ई
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ) ORGANISM: Homo US-11-000-463-810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 785CIP4ON
CURRENT APPLICATION NUMBER: US/11/000,463
CURRENT FILING DATE: 2004-11-29
PRIOR APPLICATION NUMBER: 10/291,265
PRIOR FILING DATE: 2002-11-08
PRIOR FILING DATE: 2002-11-08
PRIOR APPLICATION NUMBER: PCT/US01/02623
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR FILING DATE: 2001-08-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-11-000-463-810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Fast
SEQ ID NO 810
LENGTH: 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Tang, Y Tom
APPLICANT: Liu, Chenghua
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 810, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 09/633,870 PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 09/491,404
PRIOR FILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR FILING DATE: 2000-07-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 09/631,451 FILING DATE: 2000-08-03
                                                                                                                                                                                                                                                                                                                    150 DSKDHVFPVNDGFQALQG 167
                                                                                                                                                                                                                                                                                                                                                               280 LEKVIQQSERDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAAL- 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  164 DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGPGQIQVGVVQYGEDVVHEFHL-NDYRS 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                   222 VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       59 IRQGLEELQKVLPGGDTYMHEGFE---RASEQIYYENRQGYRTASVIIALTDGELHED--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                         --KDIVDALGDRIFSLEG 354
                                                                                                                                                                                                                                                                                                                                                                                                          -----FNETQLARIA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wang, Zhiwei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zhou, Ping
Cao, Yi-Cheng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Asundi, Vinod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/11000463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US20050266423A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rui-hong
Xiaohong B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 104; DB 7; Length 1188; Pred. No. 0.015;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels 38;
```

```
ঠ
                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens
US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-11-057-047-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Mus musculus 
US-10-601-368-25
                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn version 3.3
SEQ ID NO 2
LENGTH: 739
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2, Application US/11057047 Publication No. US20050260198A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 25
LENGTH: 182
                                                                                                                                                                                                     Best
                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Taube, Christian
APPLICANT: Gelfand, Erwin
APPLICANT: Gelfand, Erwin
TITLE OF INVENTION: Inhibition of Factor B, The Alternative Complement Pathway and
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
FILE REFERENCE: 2848-66
                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/543,594
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR FILING DATE: 2004-12-14
PRIOR APPLICATION NUMBER: US04/015040
PRIOR PILING DATE: 2004-05-13
PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Holers, Vernon APPLICANT: Thurman, Josh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/99/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT FILING DATE: 2005-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         / Match 11.5%; Score 103.5; DB Local Similarity 23.9%; Pred. No. 0.0015; DB 44; Conservative 25; Mismatches 8
                                                                            245 NIYLVLDGSDSIGASNFTGAKKCLVNLIEKVASYGVKP--RYGLVTYATYPKIWVKVSEA 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    177 DIVD 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  150 DSKD 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  117 LEKVIROSEKDNVTRYAVAVLGYYNRRGINPETFLNEIKYIASDPDDKHFFNVTDEAALK 176
55 ---DREQIRQGLEEL----QKYLPGGDTYMHEGFERASEQIYYENR-------QGY-RTA
: : : : | |: | : | : | : | : | : | | | | |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           59 IRQGLEBLQKVLPGGDTYMHEGFB---RASEQIYYENRQGYRTASVIIALTDGELHED-- 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 DIVIVLDGSNSI-YPWVEVQHFLINILKKFYIGFGQIQVGIVQYGEDAVHEFHL-NDYRS 58
                                                                                                                            1 DLYFILDKSGSV-----LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE-
                                                                                                                                                                            L Similarity
47; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 DLYFILDKSGSVLHHWNEIYYFVEQLAHKF-ISP-QLRMSFIVFSTRGTTLMKLTEDREQ 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VKDVVEAASHIEQRGGTETRTAFGIEFARSEAFQKGGRKGAK--KVMIVITDGESHDSPD 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Thurman, Joshua
Taube, Christian
                                                                                                                                                                       11.3%;
ilarity 22.5%;
Conservative 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----LFFYSEREANRSRDLGAIVYCVGVKD----FNETQLARIA 149
                                                                                                                                                                            43;
                                                                                                                                                                       Score 101.5; DB 7;
Pred. No. 0.014;
3; Mismatches 74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80;
                                                                                                                                                                                                                       Length 739;
                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 182;
                                                                                                                                                                            45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35;
                                                                                                                            54
```

```
APPLICANT: Thurman, Joshua
APPLICANT: Thurman, Joshua
APPLICANT: Taube, Christian
APPLICANT: Gelfand, Erwin
APPLICANT: Gilkeson, Gary
APPLICANT: Gilkeson, Gary
TITLE OF INVENTION: Inhibition of Factor B, The Alternative Complement Pathway and
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 2848-66
CURRENT APPLICATION NUMBER: US/11/057,047
CURRENT APPLICATION NUMBER: 60/543,594
PRIOR APPLICATION NUMBER: 60/543,594
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR APPLICATION NUMBER: 60/636,239
PRIOR FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 50/636,239
PRIOR FILING DATE: 2004-02-10
PRIOR FILING DATE: 2004-05-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin version 3.3
SO ID NO 1
LENGTH: 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-11-057-047-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 764
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-057-047-1
                                                                                                                                                                                                                                        RESULT 15
US-10-821-234-1034
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/11057047 Publication No. US20050260198A1 GENERAL INFORMATION:
                                                                     APPLICANT: Labat, I
APPLICANT: Stache-
APPLICANT: Andarma
APPLICANT: Tang, Y
                                                                                                                                                               Sequence 1034, Application US/10821234
Publication No. US20050255114A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 11.3%; Score 101.5; DB 7; Best Local Similarity 22.5%; Pred. No. 0.015; Matches 47; Conservative 43; Mismatches 74;
APPLICANT: Stache-Crain, Birgit
APPLICANT: Andarmani, Susan
APPLICANT: Tang, Y. Tom
TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
FILE REFERENCE: 821A
CURRENT APPLICATION NUMBER: US/10/821,234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Holers, Vernon APPLICANT: Thurman, Josh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               303 DSSNADWVTKQLNEINYEDHKLKSGTNT-----KKALQAVYSMMSWPDDVPPEGWNRTR
                                                                                                                                                                                                                                                                                                                                           442
                                                                                                                                                                                                                                                                                                                                                                                        145
                                                                                                                                                                                                                                                                                                                                                                                                                                        382 HVIILMTDGLHNMGGDPITVIDEIRDLLYIGKDRKNPREDYLDVYVFGVGPLVNQVNINA 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100 SVIIALTDG------ELHEDLFFYSEREANRSRDLGAIVYCVG--VKDFNETQ 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    328 DSSNADWVTKQLNEINYEDHKLKSGTNT-----KKALQAVYSMMSWPDDVPPEGWNRTR 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   270 NIYLVLDGSDSIGASNFTGAKKCLVNLIEKVÄSYGVKP--RYGLVTYATYPKIWVKVSEA 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            55 ---DREQIRQGLEEL----QKVLPGGDTYMHEGFERASEQIYYENR-----QGY-RTA 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 DLYFILDKSGSV-----LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LARIADSKDHVFPVNDGFQALQGIIHSIL 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LASKKDNEQHVFKVKD-MENLEDVFYQMI 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HVIILMTDGLHNMGGDPITVIDEIRDLLYIGKDRKNPREDYLDVYVFGVGPLVNQVNINA 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SVIIALIDG-----ELHEDLFFYSEREANRSRDLGAIVYCVG--VKDFNETQ 144
                                                                                                                                                                                                                                                                                                                                           LASKKDNEQHVFKVKD-MENLEDVFYQMI 469
                                                                                                                                                                                                                                                                                                                                                                                        LARIADSKDHVFPVNDGFQALQGIIHSIL 173
                                                                                                                                                   Ivan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 764;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     54
```

```
CURRENT FILING DATE: 2004-04-07

PRIOR APPLICATION NUMBER: US 60/462,047

PRIOR FILING DATE: 2003-04-07

NUMBER OF SEQ ID NOS: 1704

SOFTWARE: pt_SEQ_genes Version 1.0

SEQ ID NO 1034

LENGTH: 798

TYPE: PRT

ORGANISM: Homo sapiens

US-10-821-234-1034
                                                                                                                             S
                                                                                                                                                                         밁
                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                Ś
Search completed: December 14, Job time : 2.54242 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 11.3%;
Best Local Similarity 22.5%;
Matches 47; Conservative 43
                                                                                        476
                                                                                                                                 145
                                                                                                                                                                           416 HVIILMTDGLHNMGGDPITVIDEIRDLLYIGKDRKNPREDYLDVYVFGVGPLVNQVNINA 475
                                                                                                                                                                                                                  100 SVIIALTDG------ELHEDLFFYSEREANRSRDLGAIVYCVG--VKDFNETQ 144
                                                                                                                                                                                                                                                                 362 DSSNADWVTKQLNEINYEDHKLKSGTNT-----KKALQAVYSMMSWPDDVPPEGWNRTR 415
                                                                                                                                                                                                                                                                                                                                                         304 NIYLVLDGSDSIGASNFTGAKKCLVNLIEKVASYGVKP--RYGLVTYATYPKIWVKVSEA 361
                                                                                                                                                                                                                                                                                                        55 ---DREQIRQGLEEL----QKVLPGGDTYMHEGFERASEQIYYENR-----QGY-RTA 99
                                                                                                                                                                                                                                                                                                                                                                                                  1 DLYFILDKSGSV-----LHHWNEIYYFVEQLAHKFISPQLRMSFIVFSTRGTTLMKLTE-
                                                                                                                          LARIADSKDHVFPVNDGFQALQGIIHSIL 173
                                                                                     LASKKONEOHVFKVKO-MENLEDVFYOMI
                       2005, 11:59:29
                                                                                                                                                                                                                                                                                                                                                                                                                                                   43;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 101.5; DB 6; Length 798;
Pred. No. 0.016;
3; Mismatches 74; Indels 45
                                                                                          503
                                                                                                                                                                                                                                                                                                                                                                                                                                                   45;
```

Gaps

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Command line parameters:

-MODEL-frame+ D2n.model -DEV=xlh
-Q=/cgn2 1/USPTO_spool/US09970076/runat_14122005_111852_21035/app_query.fasta_1.2410
-DB=PublIshed_app_lications_NA_main -QPMT=fastap_-SUPFIX=rnpbm -MINMATCH=0.1
-LOOPECL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER-US09970076_@CGN_1 1 2715_@runat_14122005_111852_21035
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT-DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum DB seq length: Maximum DB seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95
                            300AWNH
                                                                                                                                                                                                                                                                                               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
    100.0
100.0
100.0
100.0
                                                                                                                                                                                            Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_44_216
899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               December 18, 2005, 07:35:12 ; Search time 554.247 Seconds (without alignments) 2581.163 Million cell updates/sec
                                                                                                                                                                                                                    Stand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Published_Applications_NA_Main: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9793542 seqs, 4134689005 residues
                                                                                                                                                                                                                                                                                                                                                                              : /cgn2_6/ptcdata/1/pubpna/US07_PUBCOMB.seq:*
: /cgn2_6/ptcdata/1/pubpna/US08_PUBCOMB.seq:*
: /cgn2_6/ptcdata/1/pubpna/US09A_PUBCOMB.seq:*
: /cgn2_6/ptcdata/1/pubpna/US09A_PUBCOMB.seq:*
: /cgn2_6/ptcdata/1/pubpna/US10A_PUBCOMB.seq:*
: /cgn2_6/ptcdata/1/pubpna/US10B_PUBCOMB.seq:*
: /cgn2_6/ptcdata/1/pubpna/US10D_PUBCOMB.seq:*
: /cgn2_6/ptcdata/1/pubpna/US10D_PUBCOMB.seq:*
: /cgn2_6/ptcdata/1/pubpna/US10B_PUBCOMB.seq:*
: /cgn2_6/ptcdata/1/pubpna/US10B_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DLYFILDKSGSVLHHWNEIY......
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000000000
    1008
1008
1047
1047
1056
1056
1401
                                                                                                                                                                                            DB
US-10-038-307-25

US-10-201-292-25

US-10-208-307-21

US-10-201-292-21

US-10-038-307-23

US-10-201-292-23

US-10-201-292-29

US-10-201-292-29
                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .HVFPVNDGFQALQGIIHSIL
Sequence 25,
Sequence 21,
Sequence 21,
Sequence 23,
Sequence 23,
Sequence 23,
Sequence 27,
Sequence 27,
                                                                                                                                                                                          Description
  ঠ
```

```
100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1000.0
        11534
11609
11609
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
11650
                                                                                                                                                                                                                                US-10-201-292-35
US-10-17-772-8
US-10-117-772-8
US-10-12-851-8
US-10-038-307-11
US-10-038-307-9
US-10-038-307-13
US-10-038-307-13
US-10-038-307-15
US-10-038-307-15
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-17
US-10-038-307-1
  US-10-198-846-9957

US-09-918-715-176

US-09-918-715-231

US-10-301-822-198

US-10-474-794-176

US-10-474-794-231

US-10-979-159-176

US-10-979-159-231

US-11-047-278-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-133-937-58

US-10-159-563-58

US-10-201-292-31

US-10-201-292-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-11-047-278-1
Sequence 1, Appli sequence 58, Appli sequence 58, Appli sequence 31, Appli sequence 33, Appli sequence 8, Appli sequence 8, Appli sequence 8, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 15, Appli sequence 15, Appli sequence 15, Appli sequence 17, Appli sequence 17, Appli sequence 17, Appli sequence 17, Appli sequence 17, Appli sequence 17, Appli sequence 17, Appli sequence 17, Appli sequence 17, Appli sequence 17, Appli sequence 17, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 231, App sequence 2
```

## ALIGNMENTS

```
; LENGTH: 1008
; TYPE: DNA
; ORGANISM: Homo s
US-10-038-307-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1
US-10-038-307-25
Sequence 25, Application US/10038307
Publication No. US20030134786A1
US-09-970-076-2_COPY_44_216 (1-173) x US-10-038-307-25 (1-1008)
                                          Query Match:
DB:
                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                      Pred. No.:
                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                             GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Dudith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/038,307
CURRENT PILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FAST-SEQ for Windows Version 4.0
SEQ ID NO 250-100
                                                                                                                                                                                                             sapiens
                                         3.58e-111
899.00
100.00%
100.00%
100.00%
                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 2
US-10-201-292-25
; Sequence 25, Application US/10201292
; Publication No. US20030144193A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
문
                       8
                                                     밁
                                                                                 á
                                                                                                                                                                                                                                                    SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 25
LENGTH: 1008
TYPE: DNA
ORGANISM: Homo sapiens
US-10-201-292-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                         US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                  Score:
                                                                                                                                                                                                               Pred. No.:
                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:

APPLICANT: James B. ROTTMAN

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Engin OZKAYNAK

APPLICANT: Judith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods

FILE REFERENCE: 7853-253-999

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT FILING DATE: 2003-02-14

NUMBER OF SEQ ID NOS: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141 AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        262
                                                        142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161
202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41 ValPheSerThrArgGlyThrThrLeuMetLygLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
                         21
                                                                                 μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATT
             TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTTGGTGGTGAAAGATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGAC
                                                     GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTAT
                                                                        AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr 20
                                                                                                                                                       3.58e-111
899.00
100.00%
100.00%
                                                                                                               x US-10-201-292-25 (1-1008)
                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                           1008
173
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        201
                                                        201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
```

```
Sequence 21, Application US/10038307

Publication No. US20030134786A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Engin OZKAYNAK
APPLICANT: JUdith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-2959

CURRENT APPLICATION NUMBER: US/10/038,307

CURRENT FILING DATE: 2002-06-28

NUMBER OF SEQ ID NOS: 26

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 21

LENGTH: 1047

TYPE: DNA
CRGANISM: Homo Sapiens
US-10-038-307-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 3
US-10-038-307-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similari
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                               Ś
                                                                                   믕
                                                                                                         δ
                                                                                                                                          밁
                                                                                                                                                                  ঠ
                                                                                                                                                                                             US-09-970-076-2_COPY_44_216 (1-173) x US-10-038-307-21 (1-1047)
                         밁
                                                                                                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                     No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                            289
                                                                                    229
                                                                                                                                          169 GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                           41 ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                          Similarity:
61
                                                                                                     21 TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                      μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ValllelleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTTCCCGTGAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlmGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly 80
                                                                                                                                                            AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                             3.79e-111
899.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                           Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                               1047
173
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   321
                                                          60
                                                                                       288
                                                                                                                  40
                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                              228
                               348
```

```
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Con
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 36
SOFTMARE: FastSEQ for Windows Version 4.0
SEQ ID NO 21
LENGTH: 1047
TYPE: DNA
ORGANISM: Homo sapiens
US-10-201-292-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 4
US-10-201-292-21
; Sequence 21, App.
; Publication No. 1
                                                                                                                                                                                                                                         Query
DB:
                                        밁
                                                          S
                                                                                    문
                                                                                                    ð
                                                                                                                              밁
                                                                                                                                                 १
                                                                                                                                                                        밁
                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                US-09-970-076-2_COPY_44_216 (1-173) x US-10-201-292-21 (1-1047)
                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
밁
              ક
                                                                                                                                                                                                                                                                                             Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                   Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              469
409
                                          349
                                                                                     289
                                                                                                                                                                         169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         409
                                                                                                                               229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649
                                                               61
                                                                                                        4
                   81
                                                                                                                                                   21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                        ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValllelleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle 40
                                                                                                                                                                         GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTAT 228
                                                                                                                                                                                    AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp 160
            PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/10201292
No. US20030144193A1
                                                                                                                                                                                                                                        3.79e-111
899.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                         Compositions
                                                                                                                                                                                                                                        1047
173
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              687
                                                                                                                                                                                                                                                                                                                                                                                                                                         and
                                                             80
                                                                                                        60
468
                                          408
                                                                                                                              288
                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        468
                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                           ঠ
              밁
                                     5
                                                             밁
                                                                             ঠ
                                                                                                       문
                                                                                                                          Ś
                                                                                                                                                   문
                                                                                                                                                                   S
                                                                                                                                                                                             문
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
```

```
WESULT 5
US-10-038-307-23
; Sequence 23, Application US/10038307
; Publication No. US20030134786A1
; GENERAL INFORMATION:
GENERAL INFORMATION:
; APPLICANT: Theresa L. O'KEEFE
; APPLICANT: Engin OZKAYNAK
; APPLICANT: Judith J. HEALEY
; TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
; TILE REFERENCE: 7853-299
; CURRENT FILING DATE: 2002-06-28
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 23
; LENGTH: 1056
; TYPE: DNA
; ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_44_216 (1-173) x US-10-038-307-23 (1-1056)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        No.:
                                     442
                                                                                                           382
                                                                                                                                                                                 322
                                                                                                                                                                                                                                                        262
                                                                                                                                                                                                                                                                                                                                                                                                      142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             529
 121
                                                                                                                                                                                                                                                                                                                                202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                             81
                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                             41 ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                                      ب
GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe 140
                                                        ValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer
                                                                                                                                                                                 GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                      GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGT
                                                                                                                                                                                                                                                                                                                              TACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAAATGTCCTTTATT
                                                                                                                                                                                                                                                                                                                                               TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle 40
                                                                                                                                                                                                                                                                                                                                                                                                      GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                        AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.84e-111
899.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                    80
                                                                                                                                                                                                                                                                                          60
                                                                       120
                                                                                                             441
                                                                                                                                               100
                                                                                                                                                                                 381
                                                                                                                                                                                                                                                        321
                                                                                                                                                                                                                                                                                                                              261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
```

```
Sequence 23, Application US/10201292
publication No. US20030144193A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
CURRENT FILING DATE: 2003-02-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 36
SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 23
LENGTH: 1056
TYPE: DNA
GRANIEN: Homo sapiens
US-10-201-292-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ş
밁
                      S
                                                  문
                                                                          ş
                                                                                                          밁
                                                                                                                              Ś
                                                                                                                                                             В
                                                                                                                                                                                      δ
                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-970-076-2_COPY_44_216 (1-173) x US-10-201-292-23 (1-1056)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 6
US-10-201-292-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     502
                                                                                                                                                                                                                                                                                                                                                                                      142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           622
562
                        141
                                                     502
                                                                             121
                                                                                                          442
                                                                                                                                    101
                                                                                                                                                                382
                                                                                                                                                                                                                     322
                                                                                                                                                                                                                                                                                                                                 202
                                                                                                                                                                                                                                                                          262
                                                                                                                                                                                         81
                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                 μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlualaasnargSerargAspLeuGlyalaIleValTyrCysValGlyValLysAspPhe 140
                                                                                                                                                                                                                                 GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                            ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                               TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                      GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTAT
                                                                                                                                                                                                                                                                                                                                                                                                    AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                                                                        ValllelleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                               AATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGAC
              AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                                                          GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGG
                                                                                                                                                                                                                       GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGT
                                                                                                                                                                                                                                                                                                                                  TACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.84e-111
899.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and Methods
                                                                                                                                     120
                                                                                                                                                                                           100
                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                       201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       561
                                                                                                           501
                                                                                                                                                                441
                                                                                                                                                                                                                       381
                                                                                                                                                                                                                                               80
                                                                                                                                                                                                                                                                            321
                                                                                                                                                                                                                                                                                                      60
```

```
RESULT 7
US-10-201-292-27
                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                        8
                                                                                                                                                                    á
                                                                                                                                                                                          밁
                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                           გ
            S
                                   밁
                                                      S
                                                                         밁
                                                                                                               밁
                                                                                                                               Ś
                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                   멾:
                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens US-10-201-292-27
B
                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                          622
               161
                                                                                   121 GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe
                                                                                                                442
                                                                                                                        101 ValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                     382
                                                                                                                                                                                           322
                                                                                                                                                                                                                               262 GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGAACAGAGAACAAATCCGT
                                                                                                                                                                                                                                                                     202 TACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATT
                                                                                                                                                                                                                                            41 ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                       81
                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                 21 TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
          GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                             AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                          GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTC
                                                                                                                                                     PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer
                                                                                                                                                                                          GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGG
                                                                                                                                                                                                                                                                                                                                                                           5.9e-111
899.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                x US-10-201-292-27 (1-1401)
                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Compositions and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
 660
                                                                                                                                                                                                                                                                                                                                                                    0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   173
                                                                                              140
                                                                                                                                                                        100
                                                                                                                                                                                            381
                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                            201
                                                         160
                                                                            561
                                                                                                                 501
                                                                                                                                    120
                                                                                                                                                      441
                                                                                                                                                                                                              80
                                                                                                                                                                                                                                 321
                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                       261
                                       621
```

RESULT

æ

```
Sequence 29, Application US/10201292
| Publication No. US20030144193A1
| GENERAL INFORMATION: GENERAL INFORMATION: APPLICANT: James B. ROTTMAN
| APPLICANT: James B. ROTTMAN
| APPLICANT: Theresa L. O'KEEFE
| APPLICANT: Engin OZKAYNAK
| APPLICANT: Judith J. HEALEY
| TITLE OF INVENTION: Tango 197 and Tango 216 (PILE REFERENCE: 7853-253-99)
| CURRENT APPLICATION NUMBER: US/10/201,292
| CURRENT FILING DATE: 2003-02-14
| NUMBER OF SEQ ID NOS: 36
| SOFTWARE: FastSEQ for Windows Version 4.0
| SEQ ID NO 29
| LENGTH: 1401
| TYPE: DNA
| ORGANISM: Homo sapiens
RESULT 9
US-11-047-278-1
JS-10-047-278-1
; Sequence 1, Application US/11047278
; Publication No. US20050196407A1
; GENERAL INFORMATION:
; APPLICANT: Young, John A.T.
; APPLICANT: Bradley, Kenneth A.
                                                                                                                 밁
                                                                                                                                       ક
                                                                                                                                                                     밁
                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-201-292-29
                                                                                                                                       161
                                                                                                                 622
                                                                                                                                                                     562
                                                                                                                                                                                                 141
                                                                                                                                                                                                                             502
                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                     442
                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                           382
                                                                                                                                                                                                                                                                                                                                                                                                                                                           262
                                                                                                                                                                                                                                                                                                                                                                                                   322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         142
                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                              GlyPheGlnAlaLeuGlnGlyIleIleHi8SerIleLeu 173
                                                                                                                                                                                                                          GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe
                                                                                                                                                                                                                                                                                                 ValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                    AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                                                                                                                                                                                                                                                                                                          PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                   GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                                                                    GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGG
                                                                                                                                                                                                                                                                                                                                           GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.9e-111
899.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-201-292-29 (1-1401)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    216 Compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1401
173
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Methods
                                                                                                                                                                                                                                                                                                                                                                      100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
                                                                                                                                                                                                160
                                                                                                                                                                                                                            561
                                                                                                                                                                                                                                                      140
                                                                                                                                                                                                                                                                                    501
                                                                                                                                                                                                                                                                                                                                          441
                                                                                                                                                                                                                                                                                                                                                                                                  381
                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                          321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        201
                                                                                                                                                                     621
```

```
ક
                                                   B
                                                                       δ
                                                                                                 밁
                                                                                                                            ð
                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                              밁
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296.97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/09/970,076
PRIOR FILING DATE: 2001-10-03
PRIOR PRIOR PELICATION NUMBER: 60/251,481
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-11-047-278-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sap
FEATURE:
NAME/KEY: CDS
LOCATION: (104)...
713
                        161
                                                                                                                                     121
                                                                                                                                                                                           101
                                                                                                                                                                                                                      473
                                                                                                                                                                                                                                                                           413
                                                                                                                                                                                                                                                                                                                                353
                                                                                                                                                                                                                                                                                                                                                                                        293
                                                                                                                                                                                                                                                                                                                                                                                                                                             233
                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                 41 ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                                                                 21
GGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTG
              GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu
                                                                   AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                                                                         GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe
                                                                                                                                                                             VallleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                                                                    PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer
                                                                                                                                                                                                                                                                                           GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                 GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGT
                                                                                                                                                                                                                                                                                                                                                                                         TACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                       TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGGAAAGATTTC
                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.99e-111
899.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  x US-11-047-278-1 (1-1414)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0000
```

RESULT 10
US-11-047-278-9
; Sequence 9, Application US/1104; Publication No. US20050196407A1
; GENERAL INFORMATION:
; APPLICANT: Young, John A.T.

US/11047278

160

140

592 120 532

652

100 472 60

90 412 40

352

20

```
APPLICANT: Bradley, Kenneth A.
APPLICANT: Collier, Robert J.
APPLICANT: Mogridge, Jeremy S.
TITLE OF INVENTION: Anthrax Toxin Receptor
FILE REFERENCE: 960296, 97745
CURRENT APPLICATION NUMBER: US/11/047,278
CURRENT FILING DATE: 2005-01-31
PRIOR APPLICATION NUMBER: US/9/970,076
PRIOR APPLICATION NUMBER: US/9/970,076
PRIOR FILING DATE: 2001-10-03
PRIOR FILING DATE: 2000-12-05
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PATENTIN VET. 2.1
SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
RESULT 11
US-10-133-937-58
(Sequence 58, Application US/10133937)
Publication No. US20030207278A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
Pred. No.:
                                                                                        S
                                                                                                                   밁
                                                                                                                                       S
                                                                                                                                                                   В
                                                                                                                                                                                 ঠ
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-11-047-278-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo sap
FEATURE:
NAME/KEY: CDS
LOCATION: (380)..(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 1436
                                                                                                                                                                                                                                                                                                                                                              392
                                                                                                                                                                                                                                                                                                                                                                                                              332
                                                                                                                                                                                                                                                                                                                                                                                                                                                             272
                                                                                              161
                                                                                                                                            141
                                                                                                                                                                     632
                                                                                                                                                                                          121
                                                                                                                                                                                                                   572
                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                 512
                                                                                                                                                                                                                                                                                                                452
                                                                         752
                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                     4
                                                                                                                                                                                                                                                                                                                                                                                                                                    21
                                                                                                                                                                                                                                                                                                                                                                            ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                            GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                                                                                              TACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                          TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                    AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp 160
                                                                                                                                                                                   GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe
                                                                                                                                                                                                                 PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer 100
                                                                                                                                                                                                                                                                                                                GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGT
                                                                        GGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTG
                                                                                     GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                                                                                                                                                   GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTC
                                                                                                                                                                                                                                                                 TTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (1033)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6.13e-111
899.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          x US-11-047-278-9 (1-1436)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                                                                     40
                                                                                                                                                                        691
                                                                                                                                                                                                                    631
                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                    571
                                                                                                                                                                                                                                                                                                                  511
                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                 451
                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 58

LENGTH: 1454

TYPE: DNA

ORGANISM: Homo 6

US-10-133-937-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Si
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                      밁
                                                                                                                                                                                     S
                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                     RESULT 12
US-10-159-563-58
                                                                                                                         吊
                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
                                                 Sequence 58, Application No. US200 GENERAL INFORMATION:
    APPLICANT: Khan, Javed
APPLICANT: Ringner, Markus
APPLICANT: Peterson, Carsto
APPLICANT: Meltzer, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                333
                                                                                                                                                                        693
                                                                                                                                                                                                                       633
                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                    513
                                                                                                                                                                                                                                                                                                                                                                  453
                                                                                                                                                                                                                                                                                                                                                                                                                393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    μ
                                                              Application US/10159563
vo. US20040009154A1
```

```
US-09-970-076-2_COPY_44_216 (1-173) x US-10-133-937-58 (1-1454)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Khan, Javed
APPLICANT: Ringner, Markus
APPLICANT: Peterson, Carsten
APPLICANT: Meltzer, Paul
TITLE OF INVENTION: METHODS FOR ANALYZING HIGH DIMENSIONAL DATA FOR ITITLE OF INVENTION: DIAGNOSING, PROGNOSTICATING, AND/OR PREDICTING ITITLE OF INVENTION: OTHER BIOLOGICAL STATES
TITLE OF INVENTION: OTHER BIOLOGICAL STATES
TILLE REPERENCE: 11613.56US01
CURRENT APPLICATION NUMBER: US/10/133,937
CURRENT PILING DATE: 2002-11-04
NUMBER OF SEQ ID NOS: 99
NUMBER OF SEQ ID NOS: 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn version 3.1
Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                                                                                                                                                                  GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTTTCTCCACCCGAGGAACCATTAATGAAACTGACAGAAGACAGAGAACAAATCCGT
                                                                                           AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                                                                                             GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGAAAGATTTC
                                                                                                                                                                 GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe
                                                                                                                                                                                                                    GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGG
                                                                                                                                                                                                                                      ValllelleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                                                                                                                          PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer
                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6.24e-111
899.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1454
173
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFYING,
DISEASES AND
                                                                                                               160
                                                                                                                                                                                                                                                                                              572
                                                                                                                                                                                                                                                                                                                               100
                                                                                                                                                                                                                                                                                                                                                                     512
                                                                                                                                                                                                                                                                                                                                                                                                                                         452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     332
                                                                                                                                                  692
                                                                                                                                                                                  140
                                                                                                                                                                                                                       632
                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                              752
```

Carsten

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                               RESULT 13
US-10-201-292-31
                                                                                                                                                                       밁
                                                                                                                                                                                            र्
                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                          ફ
                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-159-563-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: SELECTIONS OF GENES AND METHODS OF USING THE SAME FOR TITLE OF INVENTION: DIAGNOSIS AND FOR TARGETING THE THERAPY OF SELECT CANCERS FILE REFERENCE: 116.3.560SI1
CURRENT APPLICATION NUMBER: US/10/159,563
CURRENT FILING DATE: 2002-12-09
PRIOR APPLICATION NUMBER: US 10/133,937
PRIOR FILING DATE: 2002-04-25
NUMBER OF SEQ ID NOS: 444
SOFTWARE: Patentin version 3.1
SEQ ID NO 58
LENGTH: 1454
TYPE: DNA
ORGANISM: Homo sapiens
        Sequence 31, Application US/10201292
Publication No. US20030144193A1
GENERAL INFORMATION:
APPLICANT: James B. ROTTMAN
APPLICANT: Theresa L. O'KEEFE
APPLICANT: Engin OZKAYNAK
APPLICANT: Judith J. HEALEY
TITLE OF INVENTION: Tango 197 and Tango 216 Compositions and Methods
FILE REFERENCE: 7853-253-999
CURRENT APPLICATION NUMBER: US/10/201,292
                                                                                                                                                                                                161
                                                                                                                                                                                                                           693
                                                                                                                                                                                                                                                     141
                                                                                                                                                                                                                                                                               633
                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                    573
                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                       513
                                                                                                                                                                                                                                                                                                                                                                                                                                          453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        273
                                                                                                                                                                       753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                      GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu
                                                                                                                                                                                                                                        AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp 160
                                                                                                                                                                                                                                                                                             GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe 140
                                                                                                                                                                                                                                                                                                                                                   ValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                                                                                                                                                                                                                                     PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTAT 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                       GCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGT
                                                                                                                                                                                                                            AATGAGACA
                                                                                                                                                                                                                                                                               GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTC
                                                                                                                                                                                                                                                                                                                                    GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                         6.24e-111
899.00
100.00%
100.00%
100.00%
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            x US-10-159-563-58 (1-1454)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                  173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                 692
                                                                                                                                                                                                                                                                                                                                    632
                                                                                                                                                                                                                                                                                                                                                                                         572
                                                                                                                                                                                                                                                                                                                                                                                                                                             512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                            752
                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local S
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No.
                                                                                                                                                                                                                                                                                                          562
                                                                                                                                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                                                                                                                                              502
                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                   442
                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
```

```
RESULT 14

US-10-201-292-33

Sequence 33, Application US/10201292

Publication No. US20030144193A1

GENERAL INFORMATION:

APPLICANT: James B. ROTTMAN

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Bigin OZKAYNAK

APPLICANT: Judith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216 Com)

FILE REFERENCE: 7853-253-999

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT APPLICATION S. 36

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 33

LENGTH: 1534

TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; CURRENT FILING DATE: 20; NUMBER OF SEQ ID NOS: 30; SOFTWARE: FastSEQ for W. SEQ ID NO 31; SEQ ID NO 31; LENGTH: 1464; TYPE: DNA ; ORGANISM: Homo sapiens US-10-201-292-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                    161 GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41 ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTTCTATTCAGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValI1eI1eAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTGGTGTGAAAGATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6.31e-111
899.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2003-02-14
36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       x US-10-201-292-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches:
Indels:
                                                                                                                                                                    Compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (1-1464)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             201
```

sapiens

```
GENERAL INFORMATION:

APPLICANT: James B. ROTTWAN

APPLICANT: Theresa L. O'KEEFE

APPLICANT: Engin OZKAYNAK

APPLICANT: Judith J. HEALEY

TITLE OF INVENTION: Tango 197 and Tango 216

FILE REFERENCE: 7853-253-99

CURRENT APPLICATION NUMBER: US/10/201,292

CURRENT FILING DATE: 2003-02-14

NUMBER OF SEQ ID NOS: 36

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 35

LENGTH: 1608

TYPE: DNA

CENTRALE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2_COPY_44_216 (1-173)
             Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                       US-10-201-292-35

US-10-201-292-35

; Sequence 35, Application US/10201292

; Publication No. US20030144193A1
                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo US-10-201-292-33
                                                         ; ORGANISM: Homo US-10-201-292-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           No . .
                                                                                                                                                                                                                                                                                                                                                                                                                         562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  142
                                                                                                                                                                                                                                                                                                                                                                622
                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         202 TACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                                                                                                                                               GlyPheGlnAlaLeuGlnGlyIleIleHi8SerIleLeu 173
                                                                                                                                                                                                                                                                                                                                                                                                                        ATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                              AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ValIleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTAAAGATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGG
                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6.77e-111
899.00
100.00%
100.00%
100.00%
7.28e-111
899.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          x US-10-201-292-33 (1-1534)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative: Mismatches: Indels: Gaps:
Length:
Matches:
                                                                                                                                                                                                      216
                                                                                                                                                                                                      Compositions and Methods
 1608
173
                                                                                                                                                                                                                                                                                                                                                                                                                                                    160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          381
                                                                                                                                                                                                                                                                                                                                                                                                                           621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  201
```

```
밁
                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                 Ś
                   Ş
                                                 밁
                                                                  Ş
                                                                                           F
                                                                                                                       δ
                                                                                                                                                   밁
                                                                                                                                                                      S
                                                                                                                                                                                                    밁
                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                       뮹
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-2_COPY_44_216 (1-173) x US-10-201-292-35 (1-1608)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
                                                                                                                                                                                                                                                        322
                                                  562
                                                                                                   502
                                                                                                                                                    442
 622
              161 GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                                                           141
                                                                                                                            121
                                                                                                                                                                            101
                                                                                                                                                                                                      262 GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGAACAGAGAACAAATCCGT
                                                                                                                                                                                                                                                                                                                                                             142 GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTAT
                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                        61 GlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                        41 ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                                                                          21 TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                             1 AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                   VallleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                                                    PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer
                                                  AATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGAC
                                                               AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp
                                                                                                   GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTC
                                                                                                                GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe
                                                                                                                                                      GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGG
                                                                                                                                                                                                                                                         GGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0000
                                                                                                                                                                                                       441
                                                                                                                                                                                                                                100
                                                                                                                                                                                                                                                         381
                                                                                                                                                                                                                                                                                                            321
                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                              261
                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                                                                                                                201
                                                                           160
                                                                                                    561
                                                                                                                              140
                                                                                                                                                       501
                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                 80
                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                   621
```

Search completed: December 19, Job time: 561.247 secs 2005, 02:10:29

```
-MODEL-frame+_pin-model_DEV=xlh
-Q0=/cgn2_1/USPTO_epool/US09970076/runat_14122005_111853_21065/app_query.fasta_1.2410
-Q0=/cgn2_1/USPTO_epool/US09970076/runat_14122005_111853_21065/app_query.fasta_1.2410
-D0=Published_Applications NA_New -QFMT=fastap -SUFFIX=rnpbn -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORR=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=200000000 -USER=US09970076_@CGN_1 1 675_@runat_14122005_111853_21065
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
                                                                                                                                                                                                                                                                                                                                                                                              Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Command line parameters:
                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gcore
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No.
                                                                                                                                                                                                                                                                                                                                                         Score
                                                                                                                                                          899
128.5
118.5
118.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    re greater than is derived by a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Published_Applications_NA_New:*

1: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*

2: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

5: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

7: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

8: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*

10: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                is the number of results predicted by chance to have a ater than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Xgapop 10.0 , y
Ygapop 10.0 , y
Fgapop 6.0 , F
Delop 6.0 , F
                                                                                                                                                                                                                                                                                                                                                         Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4161431 seqs, 245089505 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           December 18,
                                                                                                                                                                                                                                                                                                                                                                                                  Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2_COPY_44_216
                                                                                                                                                                                                                                                                                100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DLYFILDKSGSVLHHWNEIY......HVFPVNDGFQALQGIIHSIL 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Copyright
                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                     5540
4740
11447
2834
3564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2005, 07:41:36; Search time 139.602 Seconds (without alignments)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Xgapext
Ygapext
Fgapext
Delext
US-11-186-284-198

US-11-080-026-3

US-11-186-284-25

US-10-750-185-39040

US-10-601-368-20

US-10-601-368-19

US-10-601-368-2

US-10-601-368-2
                                                                                                                                                                                                                                                                                                                                                         ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gummaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              607.449 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8322862
                                Sequence 198, App is sequence 3, App is Sequence 25, App is Sequence 39040, A sequence 19, App is Sequence 19, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 2, App is Sequence 
                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1
US-11-186-284-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               იიი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
```

<b>4</b>	44	43	42	41	40	39	38	37	36	35	ω 4	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	<u>1</u> 3	12	11	10	9
	68.5	•	69	٠	9	70	70	70	70	70	72	72	72	72	72	•	73.5		•	74	75	٩				91.5	95	٠						_		104
•	٠	7.7	•	•		•	•	•	•	•	•	•		•	•	•	٠	٠	•		•	•		9.1	•	•	10.6	•		٠	٠	٠	٠	11.3	٠	•
59	3144	78	N	9	730	ø	3290	Δ	w	876	3633	N	σ'n.	u	795	S	0	w	tn	1688	4	w	w	0	J	3868	88	57	46	4	17	22	44	2501	ò	96
7	6	6	6	0	σ	7	Q	σ	σ	σ	σ	σ	σ	σ	σ	σ	0	თ	თ	6	σ	σ	7	7	7	σ	σ	თ	o	δ	თ	თ	σ	0	σ	7
1-192-9	-10-392-234A	-10-467-657-72	-10-467-657-730	-10-467-657-7	-10-750-185-610	-11-117-187-1	-10-793-626-396	0-467-657-569	-10-467-657-569	-10-793-626-2	0-793-626-430	-10-793-626-432	-10-793-626-347	-10-467-962B-10	-10-793-626-3	-10-793-626-417	-10-793-626-3	-10-793-626-356	10-793-626-287	-10-510-3	-10-793-626-3	-10-467-657-611	-11-137-465-	-11-137-465-1	-11-102-240-3	-10-995-561-4	-10-601-368-	-10-995-561-13	-10-995-	-10-995-561-46	-10-995-561-46	-10-750-185-56	-10-131-826A-29	-10-821-234-18	-10-601-368-	US-11-000-463-102
equence	Sequence 17	equence 72	Φ	equence	equence	equence	Ф	equence	equence	equence	Φ	equence	equence	æ	æ	equence	æ	equence	equence	quence	equence	equence 61	equence 12	equence 11	equence 33	e 40	equence 17	e 13	e 46	equence 46	e 46	e 56	equence 29	equence 18	equence	Sequence 10
App	À	99,	5	,			60, Ap															н	•	-	•	4.	•	ω	6, Ap	5, Ap	4	394	ω `	2, Ap	÷.	2, Ap

## ALIGNMENTS

Application US/11186284 o. US20050266493A1

```
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Schlegel, Robert
APPLICANT: Schlegel, Robert
APPLICANT: Schlegel, Robert
APPLICANT: Schlegel, Robert
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: Thibodeau, Stephen N.
APPLICANT: MORAHAN, John E.
APPLICANT: MORAHAN, JOHN E.
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION NUMBER: US/11/186,284
CURRENT APPLICATION NUMBER: US/11/186,284
CURRENT APPLICATION NUMBER: US/10/301,822
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATION NUMBER: US 60/331,978
PRIOR APPLICATIO
```

```
US-11-080-026-3

| Sequence 3, Application US/11080026
| Publication No. US20050260192A1
| GENERAL INFORMATION:
| APPLICANT: Springer, Timothy A.
| APPLICANT: Springer, Timothy A.
| APPLICANT: Springer, Timothy A.
| APPLICANT: Springer, Timothy A.
| TITLE OF INVENTION: MODIFIED POLYPEPTIDES STATITLE OF INVENTION: DESIRED CONFORMATION AND TILE REFERENCE: CFBF-P02-021
| CURRENT APPLICATION NUMBER: US/11/080,026
| CURRENT FILING DATE: 2005-03-15
| PRIOR APPLICATION NUMBER: 09/945,265
| PRIOR APPLICATION NUMBER: US 60/229,700
| PRIOR FILING DATE: 2000-09-01
| NUMBER OF SEQ ID NOS: 4
| SOPTMARE: FastSEQ for Windows Version 4.0
| SEQ ID NO 3
| LENGTH: 4740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (144)...
US-11-186-284-198
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       No.:
                                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                                                      633
                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                333
                                                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     273 GACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTAT
                                                                                                                                                                                                                                                                                                            753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VallleIleAlaLeuThrAspGlyGluLeuHisGluAspLeuPhePheTyrSerGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHisGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGlnIleArg
                                                                                                                                                                                                                                                                                                                           GlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu
                                                                                                                                                                                                                                                                                                                                                                               AsnGluThrGlnLeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAsp 160
                                                                                                                                                                                                                                                                                                                                                                                                                                          GluAlaAsnArgSerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PheGluArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTTTCTCCACCCGAGGAACAACCTTAATGAAACTGACAGAAGACAGAGAACAAATCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACTTTGTGGAACAGTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
                                                                                                                                                                                                                                                                                                            GGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                    GAGGCTAATAGGTCTCGAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTC
                                                                                                                                                                                                                                                                                                                                                                 AATGAGACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCCGTGAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCATCATTGCTTTGACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTCAGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.71e-108
899.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          x US-11-186-284-198 (1-5540)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                         AND
                                                                                                                                                                        STABILIZED IN
                                                                                                                                                         METHODS
                                                                                                                                                                                                                                                                                                                                      173
                                                                                                                                                                                                                                                                                                              791
                                                                                                                                                         FOR
                                                                                                                                                         PRODUCING
                                                                                                                                                         SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                               140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       332
                                                                                                                                                                                                                                                                                                                                                                  752
                                                                                                                                                                                                                                                                                                                                                                                                                       692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
```

```
Sequence 25, Application US/11186284

Publication No. US20050266493A1

GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Millennium Pharmaceuticals, Inc.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Monahan, John E.
APPLICANT: Monahan, John E.
APPLICANT: Burgart, Lawrence J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPMO1-029P2RNM
CURRENT APPLICATION NUMBER: US/11/186,284

CURRENT FILING DATE: 2005-07-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: DNA
; ORGANISM: H
US-11-080-026-3
                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
US-11-186-284-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1015 GTGAATAAC---TTTGAGGCTCTGAAGACCATT 1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 520 GACATTGCCTTCTTGATTGATGGCTCTGGTAGCATCATCCCACATGACTTTCGGCGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       158 ValAsnAspGlyPheGlnAlaLeuGlnGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               955 AAATCCCGCCAAGAGCTTAATACCATCGCATCCAAGCCGCCTCGTGATCACGTGTTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         145 LeuAlaArg------IleAlaAspSer----LysAspHisValPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      107 AspGlyGluLeuHisGluAspLeuPhePheTyrSerGlu-----ArgGluAlaAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                784 CTGTTTAACATCACCAACGGAGCCCGAAAGAATGCCTTTAAGATCCTAGTTGTCATCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        730 CAGCTGCTT-----ĠĠĠCGGĀĆĀCACACGGCCACGĠĠĊATCCGCAAAGTGGTACGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             670 TTTACCTTCAAAGAGTTCCAGAACAACCCTAACCCAÁGÁTCACTGGTGAAGCCAATAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     625 ACCTIGITCTCT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         580 AAGGAGTTTGTCTCAACT------GTGATGGAGCAATTAAAAAAGTCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88 IleTyrTyrGluAsnArgGlnGlyTyrArgThrAla---SerValIleIleAlaLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    68 LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 TyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeuArgMetSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40 IleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAsp------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AspLeuTyrPheIleLeuAspLysSerGlySerValLeu---HisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerArgAspLeuGlyAlaIleValTyrCysValGlyValLysAspPheAsnGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----ArgGluGlnIleArgGlnGlyLeuGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8.26e-06
128.50
46.60%
26.70%
14.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGTCATTCGCTACGTCATTGGGGTGGGAGATGCCTTCCGCAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        x US-11-080-026-3 (1-4740)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -TTGATGCAGTACTCTGAAGAATTCCGGATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4740
51
38
63
39
                                                                                                 PREVENTION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    843
```

```
PRIOR APPLICATION NUMBER: US/10/301,822
PRIOR FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR PILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR PILING DATE: 2002-03-05
PRIOR PILING DATE: 2002-05-20
PRIOR PILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
SOPTWARE: FRBESEQ for Windows Version 4.0
SEQ ID NO 25
LENGTH: 11447
TYPE: DNA
COCANION.
                                                                                         RESULT 4
US-10-750-185-39040/c
                                                                                                                                       문
                                                                                                                                                              ঠ
                                                                                                                                                                                              밁
                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; NAME/KEY: CDS
; LOCATION: (1)...(9192)
US-11-186-284-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-970-076-2_COPY_44_216 (1-173) x US-11-186-284-25 (1-11447)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
GENERAL INFORMATION:
APPLICANT: MMI GENOMICS, INC.
APPLICANT: DENISE, Sue K.
APPLICANT: KERR, Richard
                                                           Sequence 39040, Application US/10750185 Publication No. US20050260603A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: HOMO FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
0
::
                                                                                                                                                                                                                                                                                                                                                                                 1543
                                                                                                                                                                                                                                                                                                                                                                                                                                             1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1438
                                                                                                                                     1768 CCTCCTGCAGAGACCCATGTGTTCACAGTGGAAGAT---TTTGATGCTTTTCAGAGGATA
                                                                                                                                                                                                                                                           1657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1378
                                                                                                                                                                                                                                                                                                                                                   93
                                                                                                                                                                                                                                                                                                                                                                                                               73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                               GANATOTTTGCAGTTGGTGTGAAGGATGCCGTTCGCTCAGAATTGGAAGCTATTGCCTCT
                                                                                                                                                                                                                    IleValTyrCysValGlyValLysAspPheAsnGluThrGlnLeuAlaArgIleAlaAsp
                                                                                                                                                                                                                                                                                                                    AAG---GGATCAAGAAGCAATGTGCCAAAGGTCATGATTCTTATCACGGATGGGAAA----
                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTGAAGATATAATT------GAAGCAATAAACACCTTCCCTTACAGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGCCTTTTTGGAAGTTCTTGTAAAAAGTTTTGAAATTTCACCAAATAGGGTCCAGATT 143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TyrTyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMet 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATATTGTGTTTTTGGTTGATGGCTCCTATAGCATTGGGATTGCAAACTTTGTTAAAGTT 1377
                                                                                                                                                                                                                                                          TCATCAGATGCTTTC-----AGAGATCCTGCGATAAAACTGAGGAATTCAGATGTT
                                                                                                                                                                                                                                                                                      HisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAla 130
                                                                                                                                                                                                                                                                                                                                                  ArgGlnGlyTyrArgThr-----AlaSerValIleIleAlaLeuThrAspGlyGluLeu
                                                                                                                                                                                                                                                                                                                                                                                 GGATCTACAAATACTGGCAAAGCAATGACTTATGTCAGAGAGAAAATATTTGTGCCTAGC
                                                                                                                                                                                                                                                                                                                                                                                                              GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuPro-----Gly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTCTTGTGCAATACAGCCGGGATCCTCATACTGAGTTCACTTTGAAAAAATTCACCAAA 1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerPheIleValPheSerThr-----ArgGlyThrThrLeuMetLysLeuThrGlu 54
                                                                                                                                                           ----SerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.000645
118.50
49.44%
30.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11447
54
35
68
23
12
                                                                                                                                     1824
                                                                                                                                                                                                                                                           1707
                                                                                                                                                                                                                                                                                                                                                  110
                                                                                                                                                                                                                                                                                                                                                                                1602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19
                                                                                                                                                                                                                                                                                                                                                                                                              92
US-10-601-368-20
, Sequence 20, Application US/10601368
; Publication No. US20050260702A1
; GENERAL INFORMATION:
                                                                                                                 S
                                                                                                                                                  밁
                                                                                                                                                                           Ś
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 39040
LENGTH: 2834
TYPE: DNA
ORGANISM: Bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-750-185-39040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Х
О.:
                                                                                                                                                   1672
                                                                                                                                                                                                               1727
                                                                                         1616 GGTA 1613
                                                                                                                                                                                                                                                                                                                                    1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2004
                                                                                                                                                                                                                                          132
                                                                                                                                                                                                                                                                                                                                                                  92
                                                                                                                                                                                                                                                                                                                                                                                                                            72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                      eLeu 173
                                                                                                                                                   -GACAGAATGTTTTTCGTGCATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ROSENFELD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19866880867914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.000247
115.00
50.00%
29.12%
12.79%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       David
```

```
APPLICANT: HOLM, Tom
APPLICANT: BATES, Stephen
APPLICANT: BATES, Stephen
APPLICANT: PATTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BO
FILE REFERENCE: MMI1100-2
CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR FILING DATE: 2002-12-31
PRIOR FILING DATE: 2002-12-31
PRIOR FILING DATE: 2002-13-31
NUMBER OF SEQ ID NOS: 64922
SOUTWARE: PatentIN version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-970-076-2_COPY_44_216 (1-173) x US-10-750-185-39040 (1-2834)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1944 CACTCCAGTGTGGCAGGCTTGGAGGTAGCCGTTGACAGCATCCAGCAG-----AAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2115 GACATTTACTTCCTTATTGACGGGTCTGGCAGTACC-----CACCAAGACGACTTTCTC 2062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2061 GCGATGAAGGTGTTCATGAATGAGGTGATAAAGATGTTCCACGTTGGACCGGAC---ÀGÀ
                                                       152 sAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIl
                                                                                                                                                                                                                                                                                           112 uAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleVa 132
                                                                                                              TTATGCAGTTGGAGTCAGAGATGCTAATATTGCTGAGCTTCAAGAGATTGCTGAA----
                                                                                                                                                CCCGGTG------GCTGATGCTGCAGAGGCGCTGAGGGGCCATGGAGTCACCAT
                                                                                                                                                                                                                                                                                                                                                                                                             nArgGlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGl 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  yGlyAspThrTyrMerHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAs 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MetSerPheIleVal-PheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspAr 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---IleTyrTyrpheValGluGlnLeuAlaHisLysphe---IleSerproGlnLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGlu------
                                                                                                                                                                                                                                                                                                                                                        TGCTCGCAGCAA-CGTGCCTT-GGTATCTCATTTGTTGTCACTGACGGCCAATCTATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGGGGCACCAAGATGGGTGAGGCCCTG---GGCAGCATGATCCAGGTCTTTGCAGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gGluGlnIleArgGlnGlyLeuGlu------GluLeuGlnLysValLeuProGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels:
|||::::::|||:::
TTTGAGTCCTTGAAGACCATCCAACAAGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BOVINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TRAITS
                                                                                                                                                                            152
                                                                                                                                                                                                                                         1728
                                                                                                                                                                                                                                                                                                                                                           177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1945
1617
                                                                                                                 1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18
```

```
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(
US-10-601-368-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
RESULT 6
US-10-601-368-19
                                                                                           δ
                                                                                                                                     밁
                                                                                                                                                                   δ
                                                                                                                                                                                                             В
                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: LOTE, JOSE M.

TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF FILE REFERENCE: 07334-275001

CURRENT APPLICATION NUMBER: US/10/601,368

CURRENT FILING DATE: 2003-06-23

PRIOR APPLICATION NUMBER: US/09/561,263A

PRIOR FILING DATE: 2000-04-27

PRIOR APPLICATION NUMBER: US 09/322,790

PRIOR FILING DATE: 1999-05-28

NUMBER OF SEQ ID NOS: 40

SOFTWARE: PASTESQ for Windows Version 3.0

SEQ ID NO 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 3564
TYPE: DNA
ORGANISM: Mus I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Pan, Yang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         664
                                                                                                                                                                                                                                                                                                                                                                    784
                                                                                                                                                                                                                                                                                                                                                                                                                                              724
                                                                                               150
                                                                                                                                     958
                                                                                                                                                                         134
                                                                                                                                                                                                                                                    114
                                                                                                                                                                                                                                                                                          838
                                                                                                                                                                                                                                                                                                                                                                                                          96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATAGTCCAGTATGGAGAAGATGCCGTCCATGAGTTCCACCTT---AATGACTACAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACTTCCTCATCATATCCTCAAAAAGTTCTACATTGGCCCCGGCCAGATCCAGGTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACATCGTCATTGTCTTAGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                        TyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                              ACGGCATTTGGCATTGAATTTGCACGCTCGGAGGCTTTCCAGAAGGGTGGAAGAAAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTAAAAGATGTGGTGGAAGCCGCCAGCCACATTGAGCAGAGAGGGGGGGCAGAGACCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleArgGlnGlyLeuGluCluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                    GCCAAG-----AAAGTGATGATTGTCATCACGGACGGGGAATCCCACGACAGCCCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly
                                                                                             AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly
                                                                                                                                                                         СувValGlyValLyвАвр-----
                                                                                                                                                                                                         TTGGGCTACTACAACCGCAGGGGGATCAATCCAGAGACTTTTCTAAATGAAATCAAATAC
                                                                                                                                                                                                                                                    LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 133
                                                                                                                                                                                                                                                                                          CTGGAGAAGGTGATCCGGCAGAGCGAGAAGGACAACGTGACCAGATACGCTGTGGCCGTT 897
                                                                                                                                     ATCGCCAGCGACCCTGACGACAAGCACTTCTTCAACGTCACAGATGAGGCGGCCCTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (3564)
                                                             AAGGACATTGTTGATGCCCTTGGGGACAGGATCTTCAGCTTGGAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.00296
108.00
38.38%
24.24%
12.01%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  x US-10-601-368-20 (1-3564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches:
                                                                                                                                                                         PheAsnGluThrGlnLeuAlaArgIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3564
28
84
38
                                                             1062
                                                                                                                                                                                                                                                                                                                                                                          837
                                                                                                                                                                                                                                                                                                                                                                                                              113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 78
                                                                                                                                                                                                                                                                                                                                    113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: PAI, YANG
APPLICANT: LOTA, JOSE M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUE
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 1090-05-28
NUMBER OF SEQ ID NOS: 40
NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2_COPY_44_216 (1-173) x US-10-601-368-19 (1-4858)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-601-368-19
                                 S
                                                                               밁
                                                                                                                     Ś
                                                                                                                                                           밁
                                                                                                                                                                                       5
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19, Application US/10601368
Publication No. US20050260702A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 4858
TYPE: DNA
ORGANISM: Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: (28)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           574 CACTTCCTCATCAATATCCTCAAAAAAGTTCTACATTGGCCCCGGCCAGATCCAGGTCGGA
                                             150
                                                                                                                                                                                   114 LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                          865
                                                                                                                                                                                                                                                                                                                                                                                            751 ACGGCATTTGGCATTGAATTTGCACGCTCGGAGGCTTTCCAGAAGGGTGGAAGAAAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       691 GTAAAAGATGTGGTGGAAGCCGCCAGCCACATTGAGCAGAGAGGAGGACAGAGACCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               634 ATAGTCCAGTATGGAGAAGATGCCGTCCATGAGTTCCACCTT---AATGACTACAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      517 GACATCGTCATTGTCTTAGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       59 IleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                        96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     39 PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21 TyrpheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                          CTGGAGAAGGTGATCCGGCAGAGCGAGAAGGACAACGTGACCAGATACGCTGTGGCCGTT
                                                                                                                                                                                                                                                                                                                  GCCAAG-----AAAGTGATGATTGTCATCACGGACGGGAATCCCCACGACAGCCCAGAC 86
                                                                                                                                                                                                                                                                                                                                                TyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                  GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly
                                         AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly 167
                                                                                   ATCGCCAGCGACCCTGACGACAAGCACTTCTTCAACGTCACAGATGAGGCGGCCCTG---
                                                                                                                                                               TTGGGCTACTACAACCGCAGGGGGATCAATCCAGAGACTTTTCTAAATGAAATCAAATAC
                                                                                                                         CysValGlyValLysAsp----
       - AAGGACATTGTTGATGCCCTTGGGGACAGGATCTTCAGCTTGGAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.00465
108.00
38.38%
24.24%
12.01%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INTEGRIN ALPHA SUBUNIT AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                       ----PheAsnGluThrGlnLeuAlaArgIleAla
```

750

78

690 58

810

95

113

924

113

133

```
문
                                                                     밁
                                                                                                      á
                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
용
                          ş
                                                                                                                                             맑
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-970-076-2_COPY_44_216 (1-173) x US-10-601-368-2 (1-3564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
US-10-601-368-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-601-368-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 2
LENGTH: 3564
TYPE: DNA
CRGANISM: Homo 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/10601368
Publication No. US20050260702A1
GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Lora, Jose M.
TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF
FILE REFERENCE: 07334-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: CDS
LOCATION: (1)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                   134
                                                                                                                                             838
                                                                                                                                                                               113
                                                                                                                                                                                                                                                                                                                                                                                                                                       607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       490
                                                                                                        114
                                                                                                                                                                                                                                                                                           724
                                                                                                                                                                                                                                                                                                                                                                 664
                                                                                                                                                                                                                                                       96
                                                                                                                                                                                                                                                                                                                                                                                                   59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21 TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                     GTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---AACGACTACAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGGCAGATCCAGGTTGGA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTTCAG
                              CysValGlyValLysAsp------PheAsnGluThrGlnLeuAlaArgIleAla 149
                                                                                                                                                                                                                                                                                                                                                               GTAAAAGATGTGGTGGAAGCTGCCAGCCACATTGAGCAGAGAGGAGGAACAGAGACCCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
ATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGATGAGGCTGCCTTG---
                                                                                                                                           CTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGATATGCGGTGGCCGTC
                                                                                                                                                                                                                 GCCAAG-----AAGGTGATGÄTTGTCATCÄCÄĞÄTGĞĞĞÄĞTCCCÄCGACAGCCCAGAC
                                                                                                                                                                                                                                                    TyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                         GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly 95
                                                                                                                                                                                                                                                                                                                                                                                                IleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                      LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (3564)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.0101
104.00
38.38%
24.24%
11.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3564
48
28
84
38
                                                                                                                                                                              113
                                                                                                                                                                                                                 837
                                                                                                                                                                                                                                                     113
                                                                                                                                                                                                                                                                                         783
                                                                                                                                                                                                                                                                                                                                                               723
```

```
밁
                                                                            δ
                                                                                                                        닭
                                                                                                                                                          δ
                                                                                                                                                                                                     닭
                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                  US-09-970-076-2_COPY_44_216 (1-173) x US-11-000-463-574 (1-3967)
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-11-000-463-574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-11-000-463-574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 107/291,265
PRIOR PILING DATE: 2002-11-08
PRIOR PILING DATE: 2002-11-08
PRIOR PILING DATE: 2001-01-25
PRIOR PILING DATE: 2001-01-25
PRIOR PILING DATE: 2001-08-03
PRIOR PILING DATE: 2001-08-03
PRIOR PILING DATE: 2001-08-03
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR PILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR PILING DATE: 2000-07-17
PRIOR PILING DATE: 2000-07-17
PRIOR PILING DATE: 2000-07-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 944
SOFTWARE: FASTSEQ for Windows
SEQ ID NO 574
LENGTH: 3967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 574, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: NOVEL NUCleic Acids and
FILE REFERENCE: 785CIP4CN
CURRENT APPLICATION NUMBER: US/11/000,463
CURRENT FILING DATE: 2004-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Tang, Y Tom
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 09/631,451
                                                                                                                                                                                                     596 CACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGGCAGATCCAGGTTGGA 65:
                                                                                                                                                                                                                                                                                      539 GACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTTCAG 595
                                        713 GTAAAAGATGTGGTGGAAGCTGCCAGCCACATTGAGCAGAGAGGAGGAACAGAGACCCGG
                                                                                59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      150 AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly 167
                                                                                                                                                                                                                                             21 TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer 38
79 GluGlyPheGlu------ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly 95
                                                                                                                                                                                                                                                                                                                              \vdash
                                                                                                                      GTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---AACGACTACAGGTCT 712
                                                                                                                                                                                                                                                                                                                            AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr 20
                                                                              IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis 78
                                                                                                                                                             PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zhang, Jie
Zhou, Ping
Cao, Yi-Cheng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qian,
Wang,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wehrman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Asundi, Vinod
Chen, Rui-hong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/11000463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGCCTGGAAGGC 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhiwe:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xiaohong
                                                                                                                                                                                                                                                                                                                                                                                                                 0.0118
104.00
38.38%
24.24%
11.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Version
                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ω
·
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                            3967
48
28
84
38
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                            score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-11-000-463-102
                                                                                                                               ; NAME/KEY: CDS
; LOCATION: (52)..(3618)
US-11-000-463-102
                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 102, Application US/11000463
Publication No. US20050266423A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 944
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 10/291,265
PRIOR FILING DATE: 2002-11-08
PRIOR APPLICATION NUMBER: PCT/US01/02623
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 09/922,279
PRIOR FILING DATE: 2001-08-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Zhou, Ping
APPLICANT: Cao, Yi-Cheng
APPLICANT: Drmanac, Radoje T.
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: Novel Nucleic Acids and
FILE REFERENCE: 785CIT94CN
CURRENT APPLICATION NUMBER: US/11/000,463
CURRENT FILING DATE: 2004-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Tang, Y Tom
APPLICANT: Liu, Chenghua
                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 09/633,870 PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2000-07-17
PRIOR APPLICATION NUMBER: 09/
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/617,746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                ORGANISM: Homo FEATURE:
                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                               ENGTH: 3969
                                                                   No.:
                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 2000-08-03
                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 09/631,451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 09/491,404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1064 ----AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGCCTGGAAGGC 1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            833 GCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCCCACGACAGCCCAGAC 886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               114 LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           887 CTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGATATGCGGTGGCCGTC 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      113 -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96 TyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGATGAGGCTGCCTTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CysValGlyValLysAsp------PheAsnGluThrGlnLeuAlaArgIleAla 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGGCTACTACAACCGCAGGGGGATCAATCCAGAAACTTTTCTAAATGAAATCAAATAC 1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Zhang, Jie
Zhou, Ping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wehrman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Asundi, Vinod
                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zhiwe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Xiaohong B.
0.0118
104.00
38.38%
24.24%
  Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멇
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-970-076-2_COPY_44_216 (1-173) x US-11-000-463-102 (1-3969)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 10
US-10-601-368-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
      Alignment Scores:
Pred. No.:
                                                                       US-10-601-368-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/10601368
publication No. US20050260702A1
GENERAL INFORMATION:
APPLICANT: Pan, Yang
APPLICANT: Lora, Jose M.
                                                                                                                                                                                                                         SEQ ID NO 1
                                                                                                                                                                                                                                                             TITLE OF INVENTION: NOVEL INTEGRIN ALPHA SUBUNIT AND USES THEREOF FILE REFERENCE: 0734-275001
CURRENT APPLICATION NUMBER: US/10/601,368
CURRENT FILING DATE: 2003-06-23
PRIOR APPLICATION NUMBER: US/09/561,263A
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US/09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR APPLICATION SER US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
PRIOR APPLICATION NUMBER: US 09/322,790
                                                                                                                                                                                                                                             SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                              LENGTH: 50
                                                                                       NAME/KEY: CDS
LOCATION: (127)...(3690)
                                                                                                                                    ORGANISM: Homo FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1066 ----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541 GACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              150 AspSerLysAspHisvalPheProValAsnAspGlyPheGlnAlaLeuGlnGly 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       598 CACTTCCTCATCAACATCCTGAAAÁÁGTTTTACÁTTGGCCCÁGGGCÁGATCCAGGTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   134 CysValGlyValLysAsp-------pheAsnGluThrGlnLeuAlaArgIleAla 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        114 LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     889 CTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGATATGCGGTGGCCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       835 GCCAAG-----AAGGTGATGATTGTCATCACAGATGGGGAGTCCCACGACAGCCCCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          658 GTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---AACGACTACAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96 TyrArgThrAlaSerVallleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   79 GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        59 IleArgGlnGlyLeuGluGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           39 PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 TyrpheValGluGlnLeuAlaHisLysphe---IleSerPro---GlnLeuArgMetSer
                                                                                                                                                                                                  5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGATGAGGCTGCCTTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGCTACTACAACCGCAGGGGGATCAATCCAGAAACTTTTCTAAATGAAATCAAATAC
                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGCCTGGAAGGC 1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11.57%
        0.0168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels:
        Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>ي</u> و
           5042
```

1065

948

888 113 834 95 774 78

714

597

54 1437

87

```
APPLICANT: Andarmani, Susan

APPLICANT: Tang, Y. Tom

ITITLE OF INVENTION: Methods for Diagnosis and
FILE REFERENCE: 821A

CURRENT FILING DATE: 2004-04-07

PRIOR APPLICATION NUMBER: US 60/462,047

PRIOR APPLICATION NUMBER: US 60/462,047

PRIOR FILING DATE: 2003-04-07

PRIOR FILING DATE: 2003-04-07

NUMBER OF SEQ ID NOS: 1704

SOFTWARE: pt_SEQ_genes Version 1.0

SEQ ID NO 182

TENERTH: 2501
 Alignment Scores
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 11
US-10-821-234-182/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score:
Percent Similarity:
Best Local Similarity:
Query Match:
                                                    US-10-821-234-182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                                                                                               Sequence 182, Application US/10821234
Publication No. US20050255114A1
                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                              APPLICANT: Labat,
APPLICANT: Stach
                                                                 TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 TyrPheValGluGlnLeuAlaHisLysPhe---IleSerPro---GlnLeuArgMetSer 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TyrArgThrAlaSerValIleIleAlaLeuThrAspGlyGluLeuHisGluAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACATCGTCATTGTCCTGGATGGCTCCAACAGCATC---TACCCCTGGGTGGAGGTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CysValGlyValLysAsp------PheAsnGluThrGlnLeuAlaArgIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAspLeuGlyAlaIleValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGAGAAGGTGATCCAGCAAAGCGAAAGAGACAACGTAACAAGATATGCGGTGGCCGTC 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCAAG-----AAGGTGATTGTCATCACAGATGGGGAGTCCCACGACAGCCCAGAC 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTAAAAGATGTGGTGGAAGCTGCCAGCCACATTGAGCAGAGAGGGGAACAGAGACCCGG 849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACTTCCTCATCAACATCCTGAAAAAGTTTTACATTGGCCCAGGGCAGATCCAGGTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspLeuTyrPheIleLeuAspLysSerGlySerValLeuHisHisTrpAsnGluIleTyr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----AAGGACATTGTCGATGCCCTGGGGGACAGAATCTTCAGCCTGGAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspSerLysAspHisValPheProValAsnAspGlyPheGlnAlaLeuGlnGly 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGGCTACTACAACCGCAGGGGGATCAATCCAGAAACTTTTCTAAATGAAATCAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluGlyPheGlu-----ArgAlaSerGluGlnIleTyrTyrGluAsnArgGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTTGTGCAGTATGGCGAAGATGTGGTGCATGAGTTTCACCTC---AACGACTACAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGluAspArgGluGln 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCGCCAGTGACCCTGATGACAAGCACTTCTTCAATGTCACTGATGAGGCTGCCTTG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IleArgGlnGlyLeuGluLeuGlnLysValLeuProGlyGlyAspThrTyrMetHis 78
                                                                                                                                                                                                                                                                                                              Stache-Crain, Birgit
                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                  Ivan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 104.00
38.38%
24.24%
11.57%
 .013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                x US-10-601-368-1 (1-5042)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative: Mismatches: Indels:
Length:
                                                                                                                                                                                                                                                             and
                                                                                                                                                                                                                                                             Treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9 2 8 2 8 9
 2501
                                                                                                                                                                                                                                                            of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              149
                                                                                                                                                                                                                                                                                                                               RESULT 12
US-10-131-826A-293
                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                          Sequence 293, Appublication No.
                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                         APPLICANT:
                                                                   APPLICANT:
                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                APPLICANT
                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1094 TATCTGGATGTCTATGTGTTTGGGGTCGGGCCTTTGGTGAACCAAGTGAACATCAATGCT 1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1214 CATGTCATCATCCTCATGACTGATGGATTGCACAACATGGGCGGGGACCCAATTACTGTC 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1316 AAGTTGAAGTCAGGGACTAACACC------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1376 GACAGCAGTAATGCAGACTGGGTCACGAAGCAGCTCAATGAAATCAATTATGAAGACCAC 1317
                                                                                                                                                                                                                                                                                                                                                                                     977
                                                                                                                                                                                                                                                                                                                                                                                                                  165 LeuGlnGlyIleIleHisSerIleLeu 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36
                                                                                                                                                                                                                                                             Baker, Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuAlaArgIleAlaAspSerLysAspHisValPheProValAsnAspGlyPheGlnAla 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGATGAGATCCGGGACTTGCTATACATTGGCAAGGATCGCAAAAACCCAAGGGAGGAT 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerValIleIleAlaLeuThrAspGly-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGTACAGCATGATGAGCTGGCCAGATGACGTCCCTCCTGAAGGCTGGAACCGCACCCGC 1215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----AspArgGluGlnIleArgGlnGlyLeuGluGluLeu------Gln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAAAGTGTCTAGTCAACTTAATTGAGAAGGTGGCAAGTTATGGTGTGAAGCCA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TrpAsnGluIleTyrTyrPheValGluGlnLeuAlaHisLysPheIleSerProGlnLeu 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACATCTACCTGGTGCTAGATGGATCAGACAGCATTGGGGCCAGCAACTTCACAGGAGCC 1491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspLeuTyrPheIleLeuAspLysSerGlySerVal------LeuHisHis 15
                                                                                                                                                                                                                                                                                                                                                                                   CTGGAAGATGTTTTCTACCAAATGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGCTTCCAAGAAAGACAATGAGCAACATGTGTTCAAAGTCAAGGAT---ATGGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspLeuGlyAlaIleValTyrCysValGly-----ValLysAspPheAspGluThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----GluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleTyrTyrGluAsnArg-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ArgMetSerPheIleValPheSerThrArgGlyThrThrLeuMetLysLeuThrGlu---
                                                                                                 Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
                                Stewart, Timothy A. Tumas, Daniel
                                                                                                                                                      Gao, Wei-Qiang
Gerritsen, Mary E.
Watanabe,Colin
Wood,William
                                                                   Smith, Victoria
                                                                                 Sherwood, Steven
                                                                                                                                                                                          Filvaroff, Ellen
                                                                                                                                                                                                         Desnoyers, Luc
                                                                                                                                                                                                                             DeForge, Laura
                                                                                                                                                                                                                                           Beresini, Maureen
                                                                                                                                                                                                                                                                                                            Application US/10131826A
                                                                                                                                                                                                                                                                                            US20050245730A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101.50
43.06%
22.49%
11.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                x US-10-821-234-182 (1-2501)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ----AAGAAGGCCCTCCAGGCA 1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -GlnGlyTyr---ArgThrAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  47
43
45
10
```

```
S
                                                                   Ś
                                                                                                           밁
                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity:
Query Match:
                                   밁
                                                                                                                                           ş
                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-970-076-2_COPY_44_216 (1-173)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo US-10-131-826A-293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 293
LENGTH: 3449
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/059588 PRIOR FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DR APPLICATION NUMBER: 60/059117
DR FILING DATE: 1997-09-17
DR APPLICATION NUMBER: 60/059122
DR FILING DATE: 1997-09-17
OR APPLICATION NUMBER: 60/059184
DR FILING DATE: 1997-09-17
DR APPLICATION NUMBER: 60/059263
DR FILING DATE: 1997-09-18
DR APPLICATION NUMBER: 60/059352
DR APPLICATION NUMBER: 60/059352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE: P3330R1C128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/059113
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059115
FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                      432
                                                                       108
                                                                                                                                                                                                                                                         543
                                                                                                                                                                                                                                                                                                                               492
 128
                                   714
                                                                                                           654
                                                                                                                                                                                   603
                                                                                                                                                                                                                     73
                                                                                                                                                                                                                                                                                                                                                                38
                                                                                                                                               93
                                                                                                                                                                                                                                                                                           53
                                                                                                                                                                                                                                                                                                                                                                                                                                      20 TyrTyrphe---ValGluGlnLeuAlaHisLysPheIleSerProGlnLeu---ArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
 LeuGlyAlaIleValTyrCysValGlyVal-----LysAspPheAsnGluThrGlnLeu
                                                                                                       GCAGAGGGGGCCCCGGCCCTGAGGGAGAATGTGCCACGGGTCATAATGATCGTGACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                    AAGGAGTTCATCGTGGACATCTTGCAATTCTTGGACATTGGTCCTGATGTCACCCGAGTG
                                                                     GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp 127
                                                                                                                                             ArgGlnGlyTyrArg------ThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                         TTCAAGAGGAAGTCCGAGGTGGAGCGTGCTGTCAAGAGGATGCGGCATCTGTCCACGGGC
                                                                                                                                                                                                                                                                                                                               GGCCTGCTCCAATAT-----
                                                                                                                                                                                                                                                                                                                                                                SerPheIleValPheSerThrArgGlyThrThrLeu------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACCTGGTTTTCATCATCACAGCTCTCGCAGTGTCAACACCCCATGACTATGCAAAAGGTC
                                     GGGAGACCTCAGGACTCCGTG------GCCGAGGTGGCTGCTAAGGCACGGGAC
                                                                                                                                                                                   ACCATGACTGGGCTGGCCATCCAGTAT------GCCCTGAACATCGCATTCTCAGAA 65:
                                                                                                                                                                                                                   GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn
                                                                                                                                                                                                                                                                                           ThrGluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.0282
100.50
46.82%
24.28%
11.18%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                x US-10-131-826A-293 (1-3449)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                GGCAGCACTGTCAAGAATGAGTTCTCCCTCAAGACC 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             See File Wrapper or PALM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3449
42
67
25
                                                                                                                                                                                                                                                                                                                                                                    -MetLysLeu
                                                                                                                                               107
                                                                                                                                                                                                                                                                                                                                                                    52
                                                                                                                                                                                                                                                                                                                                                                                                        49
                                                                                                                                                                                                                                                                                                                                                                                                                                          37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19
                                                                                                               713
                                                                                                                                                                                                                       92
                                                                                                                                                                                                                                                           602
                                                                                                                                                                                                                                                                                              72
```

```
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Bovine US-10-750-185-56394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: ROSENPELD, David
APPLICANT: HOLM, Tom
APPLICANT: HOLM, Tom
APPLICANT: BATES, Stephen
APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRI
FILE REFERENCE: MMILIOO-2
FULE REPERENCE: MMILIOO-2
FULE REPERENCE MILIOO-2
FULE REPERENCE: MMILIOO-2
FULE REPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-750-185-56394
                                                                                                                                                   Ş
                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-970-076-2_COPY_44_216 (1-173) x US-10-750-185-56394 (1-1325)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIN version 3.1
SEQ ID NO 56394
LENGTH: 1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 56394, Application US/10750185
Publication No. US20050260603A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: MMI GENOMICS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               483
128 LeuGlyAlaIleValTyrCysValGlyVal-----LysAspPheAsnGluThrGlnLeu
                                                                                                                                                                                                                                                                                                                                                 714 ACCATGACGGGGCTGGCCATCCAGTAC-----GCCCTGAACATCGCCTTCTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             654 TTCAAGAGGAAGTCCGAGGTGGAGCGTGCCGTCAAGAGGATGCGGCATCTGTCCACGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         603 GGTCTGCTCCAGTAT-----ĠĠĊAGCÁĊĠGTCAAGAACGAGTTCTCCCTCÄÄGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               543 AAGGAGTTCATTGTGGACATCCTGCAGTTCTTGGACATTGGCCCTGACGTCACCCCGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 53 ThrGluAspArgGluGlnIleArgGlnGlyLeuGluLeuGlnLysValLeuProGly
                                                                                                                                                                                                                                                                                      93 ArgGlnGlyTyrArg------ThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 TyrTyrPhe---ValGluGlnLeuAlaHisLysPheIleSerProGlnLeu---ArgMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 AspLeuTyrPheIleLeuAspLysSerGlySerVal---LeuHisHisTrpAsnGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACGTGGTCTTTATCATTGACAGCTCACGCAGCGTCAACACCCCACGACTACGCAAAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTGGGAGTGAGCCCCATGAGGACCATGTCTTCCTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AlaArgIleAlaAspSerLysAspHisValPheProVal 158
                                                                                                                                                      GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                 GCAGAGGGGGCCCGGCCCTGAGGGAGAATGTGCCTCGGGTCATAATGATCGTGACTGAT
                                                                                                                                                                                                                                                                                                                                                                                                               GlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGlnIleTyrTyrGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGAGGCCCCAGGACTCGGTG------GCCGAGGTGGCCGCAAAAGCCCCGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DeNISE, Sue K
KERR, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19866880505724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.0129
98.50
46.82%
23.70%
10.96%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FOR INFERRING BOVINE TRAITS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40
67
25
                                       145
                                                                                                                                                                                                                                                                                            107
                                                                                                                                                                                                                                                                                                                                                                                                                     92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19
                                                                                                     872
                                                                                                                                                                127
                                                                                                                                                                                                                                 824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72
```

```
Sequence 464, Application US/10995561

| Publication No. US20050272054A1
| GENERAL INFORMATION: GENERIC FOLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONSE, METH TITLE OF INVENTION: DETECTION AND USES THEREOF FILE REPERNCE: CL001559
| CURRENT FALICATION NUMBER: US/10/995,561
| CURRENT FALICATION DATE: 2004-11-24
| NUMBER OF SEQ ID NOS: 85702
| SOPTWARE: FASUSEQ for Windows Version 4.0
| SEQ ID NO 464
| LENGTH: 3175
| TYPE: DNA 1005
                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
                                                     ş
                                                                                                                                       밁
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                         გ
ş
                            문
                                                                                     밁
                                                                                                             5
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-970-076-2_COPY_44_216 (1-173) x US-10-995-561-464 (1-3175)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Homo sapiens
US-10-995-561-464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-995-561-464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
                            711
                                                        139
                                                                                      651
                                                                                                                                               591
                                                                                                                                                                                                     537
                                                                                                                                                                       108 GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp 127
                                                                                                                                                                                                                                                               483
                                                                                                                                                                                                                                                                                                                         423
                                                                                                                                                                                                                                                                                                                                                                                   363
                                                                                                                                                                                                                                                                                                                                                                                                                                           303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     243
 157
                                                                                                               88
                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                      48
                                                                                                                                                                                                                                                                                                                                                                                                              32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13 LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 LeuTyrPheIleLeuAspLysSerGlySerVal-------------
                                                                                     GAGGGCATCCGGCTCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGTACTTCGTGGTCACCTCGGACACCTCGGACGTCACCATGCAGTCCCCCACGGACATCCTG
ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                                        AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                               GECCACETCACCEGCAGCCCCTECGGGGGCATCAAGCTGCAGGCCGAGCCGGGCCCGCGAG
                                                                                                                                                                                                     ATCCGGCAGGACCGCAGCAAGGGC-----ACCGTCCACTTCGCCGTGGTCATCACCGAC
                                                                                                                                                                                                                                                               TCCTTCCGCCGCGC-----ACCTTCACCGACTGCGCGCCGACCATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                        GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                                                                                                                                                                                                                                                                                                                                ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                CTGGACCAGGTGGCGCTGAGCTGCGCTAYGGCGGCCTGCACTTCTCTGACCAGGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                           SerProGlnLeuArgMetSerPhe-----IleValPheSerThrArgGlyThr
                                                                                                                                                                                                                                                                                                                                                                                                                                           GACATCGCCAGCACGCCCCCACGAGCTCTACCGC-----AACGACTACGCCACC
                                                                                                                                                                                                                               IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerVallleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                         LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTGGGAGCGAGCCCCACGAGGACCACGTCTTCCTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AlaArgIleAlaAspSerLysAspHisValPheProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGGCATCCTGATCTTTGCCATCGGTGTGGGCCAGGTGGACTTCAACACGCTGAAGGCC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.0855
96.50
41.12%
22.84%
10.73%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3175
45
36
83
33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        METHODS
                                                                                                                                                                                                                                  107
                                                        156
                                                                                     710
                                                                                                                138
                                                                                                                                             650
                                                                                                                                                                                                     590
                                                                                                                                                                                                                                                               536
                                                                                                                                                                                                                                                                                           87
                                                                                                                                                                                                                                                                                                                        482
                                                                                                                                                                                                                                                                                                                                                     67
                                                                                                                                                                                                                                                                                                                                                                                 422
                                                                                                                                                                                                                                                                                                                                                                                                              47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12
                                                                                                                                                      Ś
                                                                                                                                                                                        밁
                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                          8
                                   ঠ
                                                                      밁
                                                                                                 S
                                                                                                                              밁
                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo US-10-995-561-465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-995-561-465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 85702
SOFTWARE: PASTSEQ for Windows Version 4.0
SEQ ID NO 465
LENGTH: 3464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: CL001559
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT FILING DATE: 2004-11-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                               651
                                                                                                                                                                                        591
                                                                                                                                                         128 LeuGlyAlaIleValTyrCysVal----
                                                                                                                                                                                                                                                537
                                                                                                                                                                                                                                                                                                                                                                  423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  759 ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATC
                                                                                                                                                                                                                                                                                                                                                                                               48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.0971
96.50
41.128
22.848
10.738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches:
Indels:
```

```
US-09-970-076-2_COPY_44_216 (1-173) x US-10-995-561-465 (1-3464)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 465, Application US/10995561
Publication No. US20050272054A1
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: DETECTION AND USES THEREOF
                                            157 ProValAsnAspGlyPheGlnAlaLeuGlnGlyIleIleHisSerIleLeu 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  483 TCCTTCCGCCGCGGC-----ACCTTCACCGACTGCGCGCTGGCCAACATGACGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    363 CTGGACCAGGTGGCGCTGAGCTGGCGCTAYGGCGGCCTGCACCTTCTCTGACCAGGTGGAG
                                                                                                                                                                                                                                                                                                                                           108 GlyGluLeuHisGluAspLeuPhePheTyrSerGluArgGluAlaAsnArgSerArgAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68 LysValLeuProGlyGlyAspThrTyrMetHisGluGlyPheGluArgAlaSerGluGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13 LeuHisHisTrpAsnGlu---IleTyrTyrPheValGluGlnLeuAlaHisLysPheIle 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 LeuTyrPheIleLeuAspLysSerGlySerVal----------
ATGCTGCCYGACTCCACCGAGATCRACCAGGACACCATCAACCGCATCATC
                                                                                                                                            AspPheAsnGluThr-----GlnLeuAlaArgIleAlaAspSerLysAspHisValPhe
                                                                                                                                                                                               GAGGGCATCCGGCTCTTCGCCGTGGCCCCCAACCAGAACCTGAAGGAGCAGGGCCTGCGG
                                                                                                                                                                                                                                                                                                  GGCCACGTCACCGGCAGCCCCTGCGGGGGCATCAAGCTGCAGGCCGAGCGGGCCCGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                  ATCCGGCAGGACCGCAGCAAGGGC-----ACCGTCCACTTCGCCGTGGTCATCACCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                              IleTyrTyrGluAsnArgGlnGlyTyrArgThrAlaSerValIleIleAlaLeuThrAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGTTCAGCCCACCGGGCAGCGACCGGGCCTCCTTCATCAAGAACCTGCAGGGCATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrLeuMetLysLeuThrGluAspArgGluGlnIleArgGlnGlyLeuGluGluLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGTACTTCGTGCTGGACACCTCGGAGAGCGTCACCATGCAGTCCCCCACGGACATCCTG 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3464
45
36
83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESPONSE,
                                                                                               AACGACTACGCCACC
                                                                                                                                                                                                                                         -GlyValLys
809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        METHODS
                                                                                                                                                 156
                                                                                                                                                                                                                                              138
                                                                                                                                                                                                                                                                                                                                                                                                                                                 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12
                                                                                                                                                                                               710
                                                                                                                                                                                                                                                                                                  650
                                                                                                                                                                                                                                                                                                                                              127
                                                                                                                                                                                                                                                                                                                                                                                                  590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  536
                                                                                                  758
```

Search completed: December 19, 2005, 02:30:41 Job time : 155.602 secs